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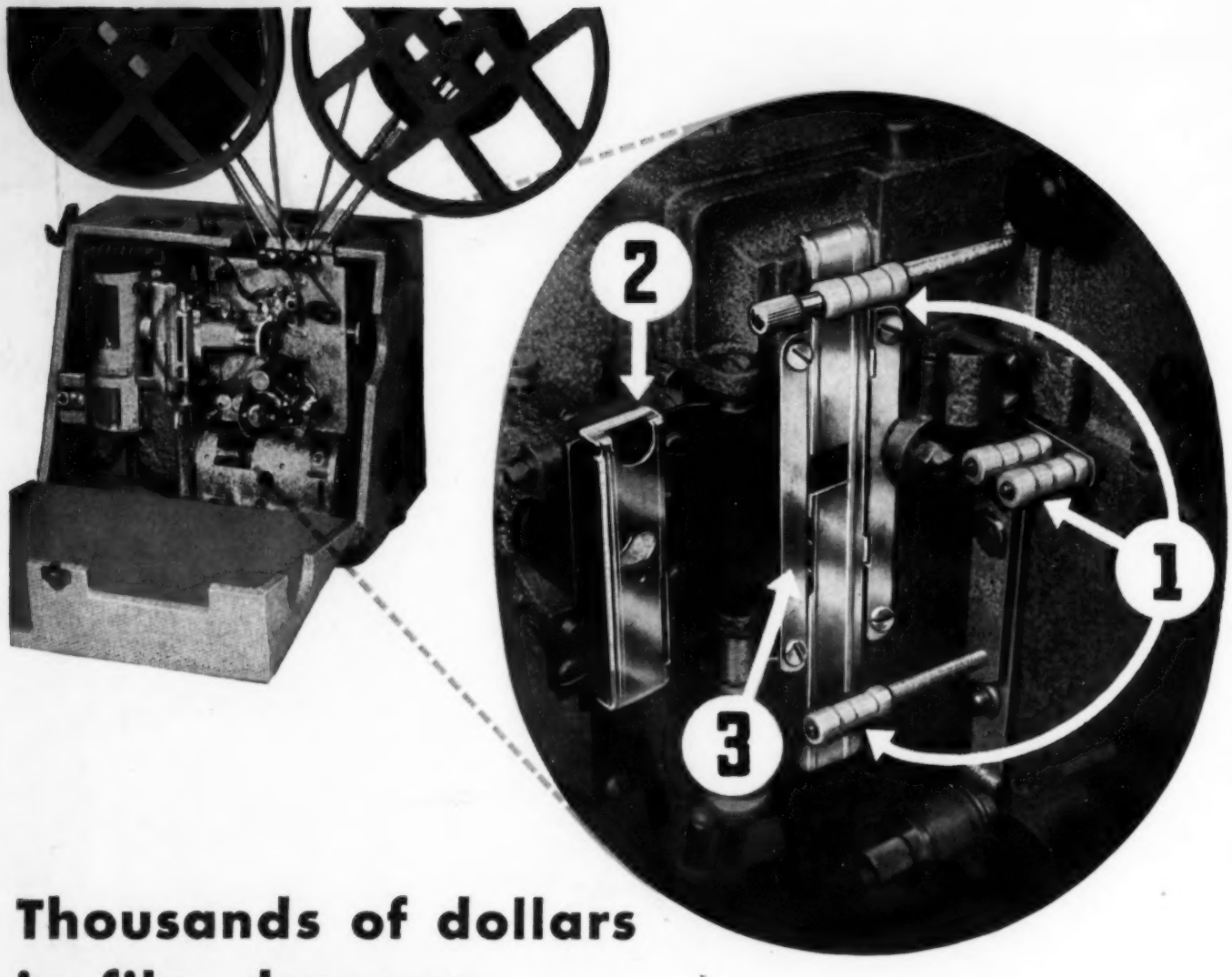
THE AMERICAN
School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION

VOLUME 112, NUMBER 4 APRIL, 1946



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THE AMERICAN
School Board Journal

A Periodical of School Administration
Published on the first day of the month by
THE BRUCE PUBLISHING COMPANY
540 No. Milwaukee Street, Milwaukee 1, Wis.
CENTRAL OFFICE: 105 SOUTH LA SALLE STREET, CHICAGO 3, ILL.
EASTERN OFFICE: 330 WEST 42ND STREET, NEW YORK 18, N. Y.

VOL. 112, NO. 4 APRIL, 1946

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SUBSCRIPTIONS. — In the United States and Possessions, $3.00 per year. In Canada, $3.00. In Foreign Countries, $4.00. Single copies, not more than three months old, 25 cents; more than three months old, 50 cents. Sample copies, 25 cents.

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The contents of this issue are listed in the "Education Index."

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Tools of Education on Display

Exhibits at the A.A.S.A. regional conferences in New York and Chicago offered a most favorable opportunity for product and service information to school administrators in attendance at these meetings. In this period of reconversion, the manufacture, distribution, and utilization of products for schoolhouse construction and operation, and for the educational program, is a most important concern of school administrators.

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Although the problems of personnel and material supply continue, many new and improved products are now available. Experience in war production and the results of manufacturers' research were clearly indicated in the new and improved products on display. Especially in the area of facilities for audio-visual instruction, in new and revised textbooks, in safety and in health, in classroom seating, lighting, acoustical treatment, there is much that is new and improved as indicated by these exhibits.

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JOHN J. KRILL

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THE AMERICAN
School Board Journal

Volume 112, No. 4 APRIL, 1946 Subscription, $3.00 the Year

Can School Expenditures for Public Relations be Justified?

*Calvin Grieder**

In recent years heavy emphasis has been given to public relations in educational administration. The periodicals of school administration have carried many articles on the subject, it has been treated in graduate courses in many universities, and even books have been written on it and widely distributed. There are associations both of college and university publicity officers and of school public relations workers.

Despite all this, literally almost none of the budget documents of our schools include *specific* appropriations for public relations. An examination by the writer of hundreds of public school budgets, prepared for school districts ranging in size from rural and village districts to the largest cities, issued during the past eight or ten years, reveals that very little provision is made for public relations.

It may be that funds for this activity are included in other appropriations, particularly in that popular account and catch-all designated as "other expenses," under one or another major budget head, and thus covered up. If so, it is unsound practice, with possibly a few exceptions, savoring of budget padding and some departure from a strictly aboveboard procedure. How much this is done is not known and it would be hard to discover. It is safe to infer, however, that it must be rather extensive, for there are signs that more public relations activity is carried on than could possibly be the case if current allotments in school budgets were realistic.

Why Omit Public Relations from Budgets?

What are the reasons for not naming public relations as such, and for making, in a way, surreptitious and furtive appropriations (or none at all) for this activity?

The term "public relations" has not outgrown, even at this late date, the unfortunate connotations of an earlier period. With some people now, as with most three or four decades ago, anyone who is engaged in public relations as a profession is regarded more or less as a parasite who specializes in bombast. To be sure, "public relations" has a much longer history than forty years, but its emergence as a specialized service of the high type familiar now has occurred only in our own time.

Furthermore, there is some confusion of public relations and advertising. Admittedly the distinction between them is not always easy to make. Grinnell, in his book, *Interpreting the Public Schools* (1937), holds that public funds ought not to be used to advertise a school, characterizing such expenditure as uncalled for and perhaps unethical. School funds may be used, he adds, to *explain* the schools to the public. This is a pretty fine distinction.

There is a third reason for the reluctance of school administrators to face squarely the problem of public relations. Cultivating the good will of the public — and hence getting its business — has always been primarily a feature of commercial and industrial enterprises. In recent years, government has resorted largely to public relations techniques to win the esteem and support of the people for a variety of activities and services. It has been demonstrated that people can be influenced to think well even of paying taxes and paying them promptly.

Mother — She's a veteran too. Mother's Day, May 12.

Noneconomic Basis of School Public Relations

The profit motive has been intimately related to commercial public relations. Administrators of public agencies have been excessively wary therefore of taking from private enterprise a cue on how to influence people and make friends. And there is an important difference. The chief end of commercial public relations is to increase business and profits. Public and nonprofit private educational institutions are not concerned with this. It is not their objective. Hundreds of millions of dollars are spent by business and industry annually for advertising their products and for the cultivation of good will and understanding — but it all adds up to promoting sales. No matter how much of the eighteen millions spent annually by one of the big soap companies for radio time alone may be allocated to advertising and how much merely to building good will, the goal is increased sales.

In a very real sense, on the other hand, the public elementary and secondary school does not need to be concerned with promotion or sales. It is an agency set up by society itself. Its clientele is to a large degree compelled by law to patronize it. To a large extent its management and finances are legally controlled. Strictly speaking, public schools and other public agencies do not have to worry about business. They are the creatures of the public, its agencies for educating the young and for other necessary public services. Public agencies are automatically entitled to support.

Certainly the basis upon which to argue for school publicity is different from that which is legitimate for private enterprise.

It is granted that interpretation has two phases: that of interpreting and reporting on the schools to the public, and that of interpreting community needs and interests

*Professor of School Administration, University of Colorado.

to the school system. The latter is not inconsiderable, but the present discussion is limited to the former, for purposes of illustration and emphasis.

Interpretation for Understanding

The word *interpretation* is used advisedly. Since schools are not, in the ordinary usage of the term, interested in expanding their "business," and are not at all concerned with profits, public relations means for them the development of public *understanding* — and understanding of what the schools are doing, their aims and objectives, their achievements, their needs, and their hopes. In part, interpretation is an accounting of the stewardship of the school board and the appointed professional personnel. With an eye to the practical, no school system can afford to ignore the relationship between the public's willingness to support the enterprise morally and financially and its understanding of what goes on. Especially the technical aspects of the school enterprise must be interpreted, but this does not mean that the other aspects do not. Schools are only one type of public institution whose well-being hinges on public understanding. Penitentiaries, orphanages, hospitals, colleges, and universities are some other major types of institutions which should be acutely interested in developing public understanding of and confidence in their work.

Numerous symptoms of the need for attention to community understanding may be noted in the press, in parents' letters to school officials, in the informal remarks made by the man in the street, in the activities of parent-teacher organizations, and probably most of all in the debates of state and national legislatures on proposed measures relating to educational problems.

A Case of Misinterpretation

Misleading data on state and local school costs are published from time to time with the conclusion usually arrived at that "our schools cost too much." An outstanding example of this occurred in 1939 in New York State, where economic interests tried to cut taxes by reducing school expenditures, although school taxes then represented only about 13 per cent of the state's total tax bill. These groups used three tactics: (1) they magnified the school tax load by stressing total state and local school taxes without relating them to expenditures for other purposes private and public; (2) they stressed the fact that New York State ranked highest among the states both in total school expenditures and per pupil expenditures, without pointing out that New York has always ranked high in most expenditures, both public and private; (3) they emphasized the increase in school taxes without calling attention to the expansion of secondary education, expansion in school services, and increases

In public school administration — to paraphrase a statement of the Secretary of the Navy, James Forrestal — it is necessary (1) to do a good job, and (2) to convince the public that a good job is being done. The justification of the latter task is argued effectively in this paper. — *Editor.*

in expenditures for other purposes, public and private. A comparison was made with Indiana school expenditures, which were considerably less, with no report whatever on the quantity or quality of service rendered, and no regard for important differences between the two states which inevitably had an influence on school costs:[1]

Educational authorities in many places and in the nation at large have been barraged with demands that schools "teach the G.I. way." Well meaning though such gestures may be, they show a complete lack of understanding of the problems and conditions involved. Probably the best response formulated to date appeared in the annual report issued in January, 1945, by Willard Givens, secretary of the National Education Association. "Our peacetime public schools and teacher training institutions have developed most of the methods that make the G.I. school effective. They have trained much of the personnel with which they are staffed. They have invented and perfected most of the equipment. They are ready to put these resources to work in all our public schools, when it becomes as important to prepare youth for peace as it is to get them ready for war. Only the American public, who must provide the money to make this expansion possible, will give the final answer to the question, 'Can the schools teach the G.I. way?' "

The report points out that the service schools used techniques and learning aids ordinarily limited to only the most favored schools. Such features as small classes, expert special services, unlimited equipment and instructional materials, carefully selected teachers trained for their jobs, cost far more than most school systems can afford now.

In Colorado during an extraordinary session of the legislature late in 1945, several lawmakers took occasion to condemn the Colorado Education Association for its efforts to increase state support of the schools and raise teachers' salaries. One, referring to clauses in some teachers' contracts requiring membership in professional organizations, accused the Association of trying to compel teachers to work under "closed shop" contracts. The speaker of the house stated that school organizations were "definitely unfair" and not working to the best interests of their own groups. One senator attempted to confuse the issues by charging that communism and socialism were being taught in the Denver schools.

[1] *Public Education Information Bulletin*, Vol. 4, Nov., 1939 (Albany, N. Y.: State Teachers Assn.).

Continuous Programs Necessary

In reality few laymen know what goes on in a school, beyond the dinner-table conversation of their children. Pains must be taken to inform them. Few know how much money it takes to operate a school, and are hardly in a position to know — just as few know what it takes for a family budget until they have their own family to budget for. The materials of study are not familiar to parents and the general public, and the methods of teaching are in a realm of professional activity foreign to them.

Regardless of how well intentioned, honest, or disinterested school boards and professional organizations may be in their efforts to improve educational service, there will be misunderstanding and lack of understanding without a well-conceived program of public relations.

A *continuous program* of interpretation is essential, and the word *program* connotes *planned* and *co-ordinated* activity. It cannot be left to chance or circumstance.

A *planned* activity must be budgeted. Planning and budgeting are so closely associated that one cannot be done without the other if the character of management is to be of superior quality.

Two considerations now reinforce the argument for planning and budgeting public relations.

The large assortment of means through which public relations may and should be conducted is one consideration. Administrators and the public alike tend to think of printed media as the dominant or sole means. This is not necessarily so. A long list of media of school interpretation other than printed materials could be cited, including exhibits, radio programs, parent-teacher activities, school activities of many kinds, advisory community councils, professional staff activities, commencement, etc. Many of these, if not all, have fiscal implications as well as values for public relations.

It is granted that some of these activities may not be included in the public relations budget account. Some may quite properly be entirely included, others partially. When it is recalled that all sorts of printed media should be added to the list, the whole assumes formidable proportions.

This being so, it is self-evident that balance in the total program of interpretation must be sought. Thus the second consideration is that not only planning for the various instrumentalities of interpretation but also planning the extent to which each one is to be utilized enters the picture.

(Concluded on page 82)

Physical Education—a Correlating Agent

Mary Louise Curtiss, Ed.M. and Adelaide B. Curtiss, M.S.J.**

Just what is physical education? It's grace and poise, bodies strong and erect with muscles firm and well toned. It's eyes alert and faces aglow with health, an alive, self-confident manner, the wholesome enjoyment of vigorous physical activities. It's building strong and adequate temples for minds keen and sound.

But physical education is more. It's learning of the game of life through the means of man-made games. It's understanding the meaning of co-operation, sportsmanship, loyalty, and courage. It's knowing how to follow as well as to lead.

But physical education is even more than that. It is one of the most simple and natural correlating agents in our elementary schools of today.

First of all, what do our educators mean by the term, correlation? They mean that arithmetic, spelling, reading, etc., are not offered as isolated subjects. They are correlated so that each contributes to the learning of another.

Second, what is there about physical education that makes it so adaptable to correlation? Interest has always been a bait for learning. What interests us, we learn to our full capacity. From the beginning of time, play has been the main interest of a child's life and will probably continue to be until the end of time. To a child, physical education means play, and therefore the physical education period is the place to correlate all subjects.

Music and Play

Consider music and physical education. There's nothing new about this correlation. The philosophers, Plato and Aristotle, sanctioned it long ago. "Blending," they called it. The blending of twin arts. Said Plato, "The mere athlete becomes too much of a savage, and the mere musician is melted and softened beyond what is good for him. The two should therefore be blended in right proportions." One of Aristotle's aims of education was "to blend music with gymnastic, and apply them proportionately to the soul."

Whether these Greeks actually prescribed the means by which the twin arts could be blended, we do not know. There are, however, at least two obvious ways music can be correlated with physical education.

Suppose the classroom teacher plays the march of the army air corps on piano or phonograph. She asks the children to listen carefully, and then to clap the count. That they might fully experience the meter, she asks them to rise and to this stirring music, march about the room.

Through correlation of social studies and music with physical education, sixth grade boys and girls are learning of a foreign land by dressing in appropriate costume and performing a native dance.

Or suppose a two-part rhythm, a rollicking polka, is being taught. After the listening and clapping phase, the actual dancing of the polka step as found in the *Bummel Schottische* and *Hansel and Gretel,* completes the learning experience.

The second "blending" involves not only music and physical education, but social studies as well.

The children in their music period listen to the music of the *Czardas,* the Hungarian national dance. In their social studies they are introduced to the men and women of distant Hungary. They read about their food and clothing and how they plant their gardens and fields.

In connection with the Dutch unit of social studies these boys and girls, through the windmill mimetic of their physical education period, are imitating the windmills of Holland.

It is not necessary to discuss the wisdom of "learning by doing." It is enough to say that we understand best what we can experience and do ourselves. The folk music, therefore, of Hungary, as represented in the simple *Czardas,* will not be sympathetically understood, nor will the children catch the gaiety and warmth of this far-off country until in their physical education period they have whirled and spun through the vigorous movements of the *Czardas,* the truest expression of the Hungarian people at play.

Physical Education Enlivens English

Be it a lad or a lass, tall or short, shy, or bold, there is in most every child an imagination — a vivid and active one. Parents know it. Teachers know it. The poet, Francis Thompson knew it. He once asked, "Know you what it is to be a child? It is to believe in love and in loveliness; it is to be so little that the elves can whisper in your ear; it is to turn pumpkins into coaches, and mice into horses, and nothing into everything, for every child has its fairy godmother in its soul."

But imaginations must be controlled, directed, and satisfied. The schools through the correlation of English with physical education can contribute much toward this end.

For example, *Grimm's Fairy Tales* are included in the literature of the elementary grades. How delightful and satisfying for the child who has learned of *Rumpelstilts-*

*Teachers, Public Schools, Cleveland, Ohio.

Boys and girls in their classroom are actively experiencing the rhythm of the polka, through correlation of physical education with music.

Through correlation of social training with physical education, co-recreation is enjoyed and classroom snobbery is quickly dispelled.

kin in his reading lesson to pretend in the following manner in his physical education period, that he is the little dwarf of storybook fame.

RUMPELSTILTSKIN[1]

At one end of the play area draw a large circle. At the opposite end draw a goal line. Choose one player to be Rumpelstiltskin, the dwarf. He stands with his back to the other players who line up on the goal line.

At a signal the players run to the circle and call to the dwarf,

"Bad little dwarf of storybook fame,
Turn around quick and tell us your name."

The dwarf faces the players and says something like this: "It isn't George or Paul or John. It isn't Alice or Betty or Joan." He must mention at least five or six names. Suddenly he says, "It's Rumpelstiltskin!" When the players hear this, they run to their goal and Rumpelstiltskin chases them, attempting to tag one of the players. The first player that he tags, exchanges places with him and the game is repeated.

And then there's Lewis Carroll's *Alice in Wonderland*. This charming tale is studied in our schools not merely for the sake of its enchanted characters — the wise blue caterpiller, the disappearing Cheshire cat, the sleepy Gryphon — but for its literary quality and the deep human wisdom that makes it a classic for young and old. Certainly, *The Lobster Quadrille* will never be forgotten if it is danced in the physical education period as the Mock Turtle attempted to describe it.

THE LOBSTER QUADRILLE FROM ALICE IN WONDERLAND[2]

NOTE: Music is *Yankee Doodle* played as indicated in the following description.

1. Will you, won't you, will you, won't you, will you join the dance?
   Will you, won't you, will you, won't you, won't you join the dance?
2. "Will you walk a little faster," said a whiting to a snail.
   "There's a porpoise close behind us, and he's on my tail."
3. See how eagerly the lobsters and the snails advance!
   Will you, won't you, will you, won't you, won't you join the dance?

Children take partners. Divide the children into groups of eight couples. In each group the eight boys stand in a line and face the eight girls in the opposite line. Couples number off from one to eight. The lines should be a good distance apart. Children sing the words. The girls are the snails, seals, and turtles. The boys are the lobsters.

Verse 1

Measures 1–4: Girls walk forward to partners four steps, and back to place four steps.

Measures 5–8: Boys walk forward four steps to partners, and back to place four steps.

Verse 2

Measures 1–4: Children 1, 3, 5, and 7 in each line, walk to the center of the free space, join inside hands high and walk to the head of their group.

Measures 5–8: These couples turn, join inside hands high, and walk back to place.

Verse 3

Measures 1–4: Children 2, 4, 6, and 8 in each line walk to the center, join inside hands high and walk to the head of their group.

Measures 5–8: These couples turn, join inside hands high and walk back to place.

The Dance

Measures 9–12: In each line, children 1 and 2 face each other, children 3 and 4 face each other, etc. With both hands on hips, each child does four step-swing steps, starting with the right foot. (Step swing: Step on one foot and hop, swinging the other foot diagonally in front.)

Measures 13–16: These partners join both hands and skip around once in place.

But there is more to the correlation of English with physical education than the direction and satisfaction of imagination. The alphabet can be painlessly learned by performing the dance, *Peas Porridge Hot*, and substituting the letters of the alphabet for the usual words.

Prepositions, conjunctions, nouns, verbs, and all parts of speech can be mastered in the following manner:

CLASSROOM FUN

Classroom row formation, players seated, equal number in each row. At a signal the first player in each row runs to the board and writes a part of speech which the teacher has called.

After the first player has returned to his place, the second player runs to the board and writes another example of the same part of speech underneath the first. This action continues until all players have had a turn. The row finishing first with all words correct, is the winner.

Taking the Dullness Out of Arithmetic

Children will no doubt always groan a bit about their tables and sums, for that seems to be childhood's prerogative. Educators do not resign themselves, however, to the unfortunate attitude — arithmetic is of no immediate use, if not completely dull.

Today, arithmetic is streamlined to complement a child's own life. Problems dealing with real situations — home life, play, work, farming, fishing, trade, gardening, cooking, etc., are considered. To bring arithmetic even closer to a child's own life, is to present it in game form.

For instance, addition can be made exciting in the same manner as was grammar in the afore-mentioned relay. Addition also becomes meaningful when correlated with the score keeping of games and relays. And in the primary grades number learning can be disguised with the following activity:

NUMBER BALL

Divide the players into groups of ten and give each group a ball. Number off and choose captains. The activity consists of a captain tossing the ball to each member of his group in any order and calling the number of the player as he does so. If the captain does not perform this action correctly, he exchanges places with the player who caught the ball.

A flippant way to present arithmetic? On the contrary, a wise one. Love for the game, loyalty, and pride for the team will cure many child's allergy to arithmetic, and create in him an urge to solve its problems swiftly and accurately.

Science Helps Play

Of course, a science program even in the elementary grades means the study of gases, solids, and liquids, the chemical properties of the air, or the weather and

---

[1]Curtiss, Mary Louise and Curtiss, Adelaide B., Physical Education for Elementary Schools, p. 89 (Milwaukee, The Bruce Publishing Company, 1945).

[2]*Op. cit.*, pp. 152–154.

the instruments to measure it. One sixth grader might make a doorbell for himself and his classmate might work with kites and ballons in his study of air currents. Granted that this phase of a science program is a far cry from physical education and correlation would be difficult, if not impossible.

But there are plants and animals to be studied too. In the fall colorful leaves are gathered from the trees in school yard or park. Each tree has a name and it must be remembered. In the spring charts are made of the wild flowers and plants to be found in woods and field. These, too, have names and they must be remembered.

And there are animals — tiger, lion, squirrel, cat, bear — and insects — moth, locust, butterfly, grasshopper, beetle — to be remembered. In science as in every other study, memory has an important part.

It was no rash statement then when Sir William Blackstone said, "There is no branch of learning but may be helped and improved by assistance drawn from other arts." The following will demonstrate how even the learning of science can be improved by assistance drawn from another art — physical education.

FLOWERS AND THE WIND

Draw two parallel goal lines a good running distance apart. Divide the players into two equal teams. Each team lines up on a goal. One team represents the flowers, and the other team represents the wind. The players on the flower team choose the name of a flower (one they have learned in their recent study).

The flowers run to the wind team and stand in front of them. When the players on the wind team guess the correct flower, the flowers run to their goal, and the wind players chase them, attempting to tag as many flowers as possible before they reach their goal. The tagged flowers join the wind. The remaining flowers choose a different name and again advance toward the wind team. The last flower (or flowers) to be tagged, is the winner.

FISH DERBY

Divide the class into two equal teams. The teams face each other and stand about five yards distant. Starting at the same end, give the first players on both teams the name of a fish, the second players another name, and so on.

When the teacher calls a name the two players with that name run to a designated goal and back to their places. The player who returns first, scores a point for his team. After all have had a turn, the team with the highest score, wins.

Good Citizenship Applied

In the training of citizenship in the elementary schools, correlation should play the major role. To be sure reading introduces to a child the characters of the past and present who exemplify good citizenship. Through classsroom discussion he learns that courtesy, consideration for others, honesty, and tolerance will help to make him a worthy citizen.

In connection with his current events study he finds and brings to class pictures of personalities in the news whom he considers good citizens.

But since school should be life itself and much of a child's life is his play, the study of good citizenship should be correlated with the physical education period where play is paramount.

Correlation of arithmetic with physical education. — Number Ball.

In his own situations then, the child learns that courtesy is waiting his turn in a game; that consideration is helping a playmate; that honesty is playing the game according to the rules; that tolerance is working with others without concern for creed or color.

Social Training

Social training not only correlates well with the physical education period, it is the most appropriate place for it to be taught. The physical education period, perhaps the most democratic period of the day, is the training ground for future society. Here, the shy, the weak, the slow, the brave and the bold work together as a team. The strong and skilled support and encourage the weak; the weak, sustained and strengthened, play their best, forgetting themselves, remembering only their team.

Classroom snobbery is quickly dispelled and in its place grows friendliness and understanding. Brilliant lads may see others, not so clever as they, run faster and never fumble the ball. Charming little girls may see the plain ones possess the greater grace and skill.

The games, *Stride Ball, Line Kick Ball,* and *Goal Ball,* are play, but they encourage team co-operation, fair competition, and a wholesome attitude toward victory and defeat.

And the rhythmicals, *The Duchess, Broom Dance,* and the *Washing Song,* are play too, but they develop in children adaptability and responsibility that make for better group living.

This list of correlations — it does not pretend to be more than a brief reminder. The creative ability of each teacher and the vivid imaginations of the many children provide fathomless sources. Take them as examples, however, to prove that physical education is not a selfish subject existing for itself alone. Rather, it is analogous to a catalytic agent in that when it is introduced into another subject it accelerates the learning thereof.

SCHOOL BUSINESS EXECUTIVES TO DISCUSS POSTWAR PROBLEMS

President Edwin F. Nelson has announced a comprehensive program of meetings and special discussion conferences on postwar school business administration for the 1946 convention of the Association of School Business Officials, at Pittsburgh, April 15 to 18. Emphasis will be placed particularly on school building construction, the administration of noninstructional personnel, surplus war property, school purchasing standards and financial accounting.

The list of speakers will include Dr. N. L. Englehardt of New York City; Dr. Ray L. Hamon of the Office of Education, Washington, D. C.; Dr. H. F. Alves, director of surplus war properties, U. S. Office of Education; Otis Crosby, Detroit, Mich.; Dr. Lee M. Thurston, Lansing, Mich.; Dr. Emery M. Foster, and others.

Secretary H. W. Cramblet, reports that the exhibit space has all been sold and that the advance reservations indicate a large attendance. Headquarters will be in Hotel William Penn.

A democracy is powerfully helped along by citizens who have the habit of playing with one another. Things go bad when too many citizens take their pleasures by their individual selves or with their small intimate groups; sit in their rooms twirling a private dial and listening privately to what comes over the air; or occupy a seat hired for their private use in a theater and sit insulated by the dark. Citizens of a democracy who never play together miss the chance of really knowing one another. They suffer the damage of splitting up into sets, cliques, classes, and castes. — *Harry A. Overstreet.*

"School Boards in Action"

H. B. Mulford, Esq.[1]

At long last an important number of school superintendents and university professors have formally turned their attention to "the dilemma of the school board," with the apparent purpose of investigating it, reducing their conclusions to writing, and making a significant contribution to educational literature by publishing their findings. In 1944, there was appointed, under the auspices of the American Association of School Administrators, a committee of ten people of experience, both in professional school administration and in school board work, to produce a factual report on the school board as representative school government. That report has now been published by the Association as its 1946 yearbook under the title of "School Boards in Action," and has received an initial circulation of about five thousand copies to members of the Association. Thus it becomes the lastest of about half a dozen manuals largely planned for the enlightenment of school board members in their civic avocation.

Apart from the organization or contents of the book, its publication is significant for a double reason: the fact of this formal and formidable sponsorship of a study in a field greatly misunderstood and neglected. It strikes this reviewer as further significant that research on the same subject which was conducted by the parent organization, The National Education Association, has recently been publicized in the journal of that leading association. Thus the question that arises most naturally with both lay and professional people interested in the unique American institution of the school board concerns whether the N.E.A. has set its composite mind to making the whole of its membership informed on school government. If so, the act of publishing this book and any concerted follow-up on information for the N.E.A. membership may make the book a milepost in the history of American education. But to understand this significance one possibly needs to have stated the background against which it is published, a background which is in no way described in the volume.

The Left Wing Attitude

It is not ten years ago that it was the habit of the extreme "left wing" people in school administration, when gathered at important conventions or conferences on university campuses, to browbeat the institution of the school board *in absentia*. Broadly speaking, all school boards were lumped together in one category and the faithful, as well as the well-meaning but uniformed citizen officials, were blamed for the sins of the "politicians." Because these abuses were conducted by people of some standing in education, the allegations were taken up by numerous groups, including teachers, who failed utterly to understand the school board and were content merely to give it a black eye.

With complete inconsistency there was the constant and commendable plea that, whatever enventuated, the local faculty and administration should have autonomy, in order to "keep the schools close to the people." The abuse from time to time was formalized with statistics taken from reasonably good examples of research, but with *obiter dicta* on school board conduct which presented an entirely fallacious outlook. This went, in some "classical" cases, to the point of saying that neither school boards nor trustees of colleges and universities could aid in providing democratic government for schools and colleges or in "liberalizing" education. It is only within recent time that other research has disproved these basic fallacies. But the damage to the reputation of the institution of the school board in the minds of many people has not been overcome.

Much of this adverse situation in public relations came simultaneously with the efforts of vested interests in education to establish a proper and justified recognition of the basic need for professional rather than lay administration of the public schools. That battle had really been won a quarter of a century ago; even capricious dismissal of administrators by ill-informed or "political" boards has not nullified the validity of the superintendency as an established position in education.

Attitudes of Superintendents

Two additional factors are to be seen in this background of the new book. One is the disclosure of a fairly poor record of superintendents in their attitudes toward formally and methodically aiding school board members to a knowledge of what membership entails in knowledge and responsibilities. Several national surveys have indicated that a very small percentage of superintendents did scrupulously try to aid the board and not to make of it a "rubber stamp"; a similarly small number had good intentions but procrastinated; the great majority conducted administrator-board relations on the basis outlined by one frank administrator: "If you had had as many board members to deal with as I have had you would be content merely to have a quorum to O.K. your bills."

The other factor is the steady growth of the demand that the board and the superintendent, and even the faculty, constitute a working, co-operative team. Slowly but forcefully school boards have organized their own co-operative associations which, in sharp default of professional aid in thousands of cases, have set to work to provide working information for boards. These associations have made themselves felt outstandingly in constructive school legislation, in sponsoring informative material to be distributed to member boards, and in bringing about a constructive rapprochement between all forces of public education to the one general end of improved public schools.

While "School Boards in Action" recognizes the value of boards and their associations and objectives, the book does not tell any of this adverse story of the development of the school board as an unique American institution which all hands now seem to wish to preserve. Thus the greater significance of the sponsorship of the book has not been clarified to the readers. Possibly this would have been undiplomatic. But there are two other important flaws.

It should have been more pointedly recognized that there are wide gaps in school board operations between the one-man board in the exceptional case, the usual three-member boards of rural schools, the five- to seven-member boards in the great majority of systems, and the larger boards with multifarious duties in the greatly congested larger cities. In these latter systems administrative theory has not sufficiently "jelled" to know what should be a maximum size for systems and their boards and at what point decentralization should be encouraged in contrast with the nationally obvious need to centralize rural schools around logical "natural" communities.

The Need for Mature Boards

Some treatment also should have been given to the obvious fact that the world is in a state of social revolution, which must be reflected not only in the content of education but in the devices of school government and administration. Thus, just as the position of superintendent had to be recognized and matured, so the school board has to be aided into maturity. And this must be done in the peculiar setting wherein possibly seven eighths of the present number of about 112,000 school boards must witness their own demise as logical district reorganization takes place.

If this book is the latest addition to what may be considered classical treatment of local government of our public schools, it is not the last word. It seems to this reader that the book falls into a category somewhat different from that of half a dozen good manuals for boards issued during the past dozen or more years. Oddly enough, these other books were mostly written on the question and answer basis, as if they were to be consulted for specific references as particular occasion should arise. Thus while good theory and practice may be inculcated by their use, "School Boards in Action" contains and emphasizes

[1]Wilmette, Ill.

PUEBLO VOTES SCHOOL DISTRICT CONSOLIDATION

On March 4, 1946, School Districts No. 1 and 20 of Pueblo, Colorado, were consolidated by popular vote under a law enacted specifically by the state legislature. The two boards will act as a combination board for the new district which becomes District No. 60.

The movement for the consolidation was initiated by the members of the school boards themselves who realized the disadvantages of two school administrations within a single urban community. Several meetings were called by the board members and the executive officers to iron out the economic and legal problems in the consolidation, which had the backing of the Chamber of Commerce and other civic groups.

The combination board was organized on March 5, with the following officers: John L. MacFarlane, president; Arthur Samples, vice-president; Olga Hellbeck, secretary; George B. Levis, treasurer and purchasing agent; C. F. Haaff, superintendent of buildings and grounds; Paul L. Kirk (former superintendent of Dist. 20), assistant superintendent; James H. Risley (former superintendent of Dist. 1), acting superintendent.

The Pueblo schools were divided into two districts from the earliest settlement of the area. District No. 1 comprised the retail and a residential area and District 20 included the area where the steel mills are located.

The new board will include the ten members of the original board. These will retire as their terms expire until the board consists of six members, three from each former district. After ten years the board will be reduced to five members.

Superintendent James H. Risley will retire on pension in June and the board will elect a successor who has not been connected with either district. Mr. Paul L. Kirk of District No. 20 has become assistant superintendent.

In the picture are the following (standing left to right): Roy O. Frantz, William L. Hyde, Arthur Samples, George Grosvenor, C. F. Haaff, A. B. Chasteen. Seated left to right: R. B. Flemmons, Olga Hellbeck, Mrs. Dorothy Jackson, James H. Risley, Hamilton H. Stewart, George B. Levis, E. D. Hoffman.

to a greater degree a philosophy of local school government. The joint authors seem to set store by abolishing standing committees of boards, by emphasizing state responsibility for education and, in the same breath, by striving for local control and telling board members how to be good. They do not "carry the torch" for many obvious needs for reform. For instance, they do not meet the problem of the great lack of men in teaching positions and the causes for this failure. They barely allude to the need for the United States Office of Education to recognize its obligation to do something directly helpful for and to school boards. And finally they do not set forcefully before the very association which sponsors their work the increasing demand from intelligent school board members that the profession owes them much more in the shape of careful aid than has been the record of the past.

Governmental Aspects of School Administration

It is difficult to forecast what will be the reaction of those educational "authorities" who, being saturated in the appeals of subject matter, do not think it necessary for administrators, not to mention school boards, to be specifically trained for the governmental aspects of their calling. Large groups of college professors and some outstanding leaders have expressed the opinion that such training is unnecessary. Such authorities obviously cannot have had to dig through ten years of school board records to understand what sort of a school system or community they were to lead. They have not had almost to forsake pupil and teacher contact in order to aid in mastering the problems of bad school laws, tax delinquencies, tax objections, teacher strikes, tenure cases and hearings, and altogether inadequate financial support, due largely to inadequate districting. Such authorities may not reckon as valid the repeated suggestions that teachers colleges and universities require the student reading of the school law of a particular state and such material as "School Boards in Action" before being permitted to recommend teachers or administrators for certification by the state. The book itself might have emphasized the need to remove administrative training from the "elective" to the "required" status.

There is one other shortcoming in this book. There is stark ignorance in many quarters over the manner in which school laws have been built patch-upon-patch through both co-operation and interference of pressure groups, of which any state can record a dozen or more. Nearly any well-intentioned group should be made conscious of the fact that state legislatures generally do not initiate the legislation under which school boards have local government autonomy. The book does point out that there has been a pretty steady growth in legislative requirements, often meddlesome, of subject-matter treatment in the local schools. Leaders are importuned repeatedly to "do something" to repress this type of state regimentation if one glances at the ways and means by which good theory and practice when imbedded in school law might release untold educational energies of any state, it is striking that the very leaders who often are the most vocal in the higher reaches of our greatly stratified educational systems are absent from the more lowly groups which produce good legislative results. Possibly it would not have been diplomatic to say so, but education needs action from these leaders.

Usually when a new book comes out, its success or failure is determined by its contents. In the case of "School Boards in Action," its importance lies in the ultimate purpose of its sponsors. If as a profession, they consistently strive to provide the school boards with competent superintendents and to press their own membership to aid in the maturation of the school board toward high ideals through the purposeful aid from the local superintendents, the book may prove to be one of the most constructive forces in public education.

The District Clerk in the State of New Jersey

*Charles L. Worth**

The district clerks in New Jersey are officials appointed by the local boards of education. They are responsible for the proper financial accounting of one of the largest enterprises in the State of New Jersey — that of public education.

In only two states, New Jersey and Montana, is the term district clerk used. In other states the officer is referred to as secretary or clerk of the board of education. However, New Jersey has divided its schools into two distinct groups — the Chapter VI or city districts and the Chapter VII or town, township, borough districts. The connotation of the word city must not be construed as meaning a community larger than a town since in New Jersey a town, township, or borough may have a population of 50,000 while a near-by city may have a population of 5000. With but a single exception the city districts in New Jersey appoint a secretary to the board of education, while the remainder of the school districts, and the greater number by far, appoint district clerks.

Nearly 80 per cent of the district clerks in New Jersey are men; the percentage being slightly higher in rural communities and lower in urban districts. Among part-time clerks there is also a slightly higher percentage of males than among full-time clerks.

Neither the size of the district nor the number of employees is always an indication of whether the clerkship is a part-time or full-time job. Full-time clerks are employed in districts having as few as 28 employees in striking contrast to districts with 150 or more employees including a part-time clerk. The majority of school districts in the state of New Jersey employ from 1 to 20 persons with a part-time clerk.

Less than 40 per cent of the district clerks in New Jersey are members of boards of education with the right to vote. About 60 per cent of all clerks are appointed by the board, not elected members of the board. The remaining 40 per cent are elected board members and later appointed by the board to the position of clerk. In the South New Jersey area 50 per cent are board members; in North New Jersey less than 20 per cent.

About 75 per cent of the part-time clerks are presently engaged in professional, business, or clerical occupations. The next largest group is farmers, followed by the skilled trades, and finally, housewives.

Education and Occupations of Clerks

Twelve per cent of New Jersey's district clerks have had less than a formal high-school education. Many of these have attained respected and influential positions in their communities. About 40 per cent have had one or more years in a liberal arts college or a business school. Thirteen per cent have received degrees ranging from B.A. to M.D. There is no appreciable difference in the education of full-time and part-time clerks.

Among the professional people who have been appointed or elected to the position of district clerk, educators, i.e., teachers, superintendents, and principals, represent 11 per cent of the total for the state. About the same number have had experience as members of boards of education.

The occupational background of most of the district clerks is exceptionally well suited to the duties of the office. Sixty per cent of part-time clerks and 90 per cent of full-time clerks were professional men and women, filled clerical positions, or were in business before assuming the office. As the number of full-time clerks increases, the stature of the office will undoubtedly grow, its importance will be better understood, and its contribution to school efficiency will be enlarged.

There are a number of part-time district clerks who believe that, because of the amount of work involved, the position should be a full-time job with commensurate pay. Eight per cent of the part-time clerks believe that their positions should be full time. One hundred per cent of the full-time clerks consider their positions full time indeed.

The district clerk, probably because of his propensity for and experience in the field of bookkeeping and finance, is often called upon to fill other positions in his community where these talents may be used. Thirty per cent of the district clerks in New Jersey hold some other appointive or elective position in the community. More than half of these additional positions pay salaries.

Community Occupations of Clerks

Below are listed a number of additional community positions held by district clerks:

Township clerk
Chairman, OPA Board
Township treasurer
Secretary-treasurer, Defense Council
Political County Committee
President, Library Association
Attendance officer
Library director
Secretary, Church Board of Trustees
Treasurer, Firemen's Relief Association
Member, Board of Health
Member, Defense Council
Mayor
Borough clerk
Tax assessor
Executive committee woman
Postmaster
Member, Election Board
Member, Advisory Board
Member, Township Committee
Boro councilman
Member, Township Council
President, P.T.A.
Registrar vital statistics
City auditor
Judge of Elections
Vice-President, Committee Council
Member, Adjustment Board
Police marshal and president of Fire Dept.
Clerk, Rationing Board
Secretary, Volunteer Fire Department
Treasurer, Building and Loan Association
County freeholder
Custodian of school moneys, Regional High School
Member, Civilian Defense Committee

The people and the boards of education exhibit confidence and faith in the honesty and efficiency of the district clerks in New Jersey. The bookkeeping system is prescribed by the State Department of Education and the state employs inspectors of accounts. These factors and the quality of the personnel may contribute to the fact that very few districts engage the services of C.P.A.'s or local auditors. Full-time clerk districts employ the greatest number of C.P.A.'s.

The size of the school district based on the number of employees does not indicate the completeness of the district clerk's office equipment. Actually many districts having from 1 to 30 employees provide a furnished office for their part-time district clerk. Several full-time clerks in districts having from 40 to eighty employees are not provided with a furnished office. A typewriter and filing equipment are supplied to the vast majority of district clerks.

Nearly half of the districts employing full-time clerks, and some districts with part-time clerks, also employ assistants. Since the work required is closely related to the number of employees in the district, it is reasonable to expect a part-time clerk in a district employing from 60 to 100 persons to need an assistant just as much, if not more, than a full-time clerk in a community with the same number of school employees.

Functions of the Clerk

To a large extent the district clerk in New Jersey believes that he is the person charged with the business administration of the schools. A small percentage of the clerks believe that the supervising principal or a committee of the board is in charge of business administration, while a still smaller group feel that the responsibility is held jointly. In the full-time clerk districts the clerk is predominantly considered to be the person charged with the business administration of the schools.

Gerwig[1] and Schutte[2] debated the issue in the SCHOOL BOARD JOURNAL as to whether

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[1]Gerwig, George W., "Should the School Secretary Be Under the Direction of the Superintendent?" AMERICAN SCHOOL BOARD JOURNAL, September, 1924.

[2]Schutte, T. H., "Should the School Secretary Be Under the Direction of the Board of Education?" AMERICAN SCHOOL BOARD JOURNAL, December, 1924.

the school secretary (district clerk) should be under the direction of the superintendent or the board of education.

The *Encyclopedia of Educational Research*[3] presents the two sides of this question in the following manner:

The usual arguments advanced by the proponents of multiple organization are (*a*) The administration of both the educational and business phases of the schools is too large a task for one person to perform. (*b*) Superintendents (supervising principals) are often incompetent in training and experience to direct the business affairs even though they might have time.

Although the multiple plan has worked successfully in many school systems, the tendency in theory and practice is away from it and toward the unit plan. More than 90 per cent of the school systems of the nation now operate under the unit plan and this percentage is increasing every year. The advantages usually claimed for the unit plan may be summarized as follows:

1. It provides for centralized control, and such control is considered to be, at least in all other endeavors, a first principle of efficient management. It is worth noting, for example, that industries have only one president, superintendent, or other head, and that a company of soldiers has only one captain.

2. It secures co-ordinated effort and thereby tends to eliminate duplication of effort and friction which frequently occur in multiple-headed organizations.

Extensive research on the relative efficacy of the two types of organization has been reported by Heer,[4] Marberry,[5] and Smith.[6] These studies show in the main that multiple-headed school systems spend more annually per pupil than the unit-headed ones. They also reveal that business functions require a larger percentage of the budget under multiple organizations than under unit organizations. All the studies cite instances of a lack of an educational point of view on the part of business officials in multiple organizations; all give examples of friction in such organizations; and all argue finally for centralized control which one head only can provide.

This question arises from time to time in New Jersey and has not been completely answered in the statutes and is seldom answered by resolution of the board of education.

Actual Duties of Clerks

Frequent discussion and sometimes conflict are brought about by a board of education's failure to establish a specific policy and a program of duties to be carried out by each officer. Although the statutes of New Jersey designate some of the duties to be performed, a district clerk, unless instructed by the board of education to assume or not to assume specific duties, is not in a position to co-ordinate his work properly with other school officers.

In addition to 67 statutory powers and duties set forth by law, the district clerk in some school districts in New Jersey is performing the following duties with or without the consent of the board of education:

1. Employs janitors and engineers
2. Employs clerical help
3. Grants permission for the use of schools
4. Takes water samples for purity diagnosis
5. Takes care of any emergency
6. Makes reports to employees on salaries and deductions
7. Issues working certificates
8. Assumes complete charge of schools when board of education is not in session
9. Reviews all complaints from parents
10. Services school electrical equipment — free
11. Purchases and distributes bus tickets to students attending high school
12. Registers high school pupils
13. Sends out tuition bills
14. Takes care of school milk program reports
15. Takes care of school activities fund
16. Takes care of receipts, bills, and orders for all athletics
17. Collects admission tax — reports to government
18. Is treasurer of athletic association
19. Is custodian of student organization funds

The district clerkship, be it full time or part time, in a small or large district, is a public position which, when secured by a citizen, is not lightly or quickly relinquished. There are probably many reasons for this. One which is especially relevant to the smaller districts concerns the general feeling that the bookkeeping is so complex that a change in personnel would be unwise due to the scarcity of adequately trained people. However, when the manual of instructions for the state prescribed bookkeeping system is used, a sound knowledge of arithmetic and careful attention to detail will suffice to keep the records accurately. Some district clerks have served their communities for more than 40 years. The vast majority of district clerks have spent from 6 to 25 years in the position. There is no appreciable difference between the full-time district clerk's length of time in office and that of the part-time clerk. The years of service are distributed along relatively similar lines.

Legal Tenure of Clerks

Full-time district clerks come under the New Jersey tenure of office law as indicated in the 1938 edition of the New Jersey School Laws.

Article 13. *Secretaries, District Clerks, and Business Managers*

18:5–51. *Dismissal or reduction of secretary, district clerk, or business manager in certain municipalities after service period.* No secretary, district clerk, assistant secretary, business manager of any board of education in any municipality devoting his full time to the duties of his office, after three years' service, shall be discharged, dismissed, or suspended from office, nor shall his compensation be decreased, except upon a sworn complaint for cause and upon a hearing had before the board.

Upon the filing of the complaint, a copy thereof, certified by the clerk as a true copy, shall be served upon such respondent at least five days before the hearing and he shall have the right to be represented by counsel at such hearing.

If, upon the hearing, it shall appear that the person charged is guilty of neglect, misbehavior, or other offense set forth in the complaint, then the board may discharge, dismiss, or suspend him or reduce his compensation, but not otherwise. Chapter 247, P. L. 1938.

Compensations of Clerks

Amazing as it may seem, 12 per cent of the present salaries of district clerks in New Jersey are lower than in 1929. However, the decreases in salaries are due to the fact that, when new people succeed to the district clerkship, they start at a lower salary.

Sixty-seven per cent of the salaries have been increased during the period from 1929 to the present. The increases range from $12 to $1,800. The average increase in the part-time district-clerk districts amounts to $151 while the full-time districts' average increase amounts to $630.

This over-all general trend of increased salary is no doubt concurrent with all salary increases, but at the same time it may point to an awakening on the part of communities and boards of education to the important fact that efficient handling of the district clerk's duties goes hand in hand with proper school functioning and therefore must be paid for equitably according to the size of the task.

The amount of increase is not much affected by the size of the school district (number of employees), but a greater percentage of full-time clerk districts record salary increases. Only 21 per cent of all the salaries have not been changed during the period considered. Practically all of these are in part-time districts. With the exception of one district where the salary remains the same, 100 per cent of the full-time district-clerk districts have increased the salaries.

One district clerk, a full-time employee, receives the munificent sum of $650 for his services in a district employing 40-80 people; in the same section of the state another full-time district clerk receives the salary of $5,500 in a district employing 180 persons. This difference is too great, and the $650 salary ought to be headed in the direction of the $5,500 salary.

A majority of the district clerks indicate that more work has been thrust upon them recently due to a number of different causes. By far the largest number point to new taxing programs which have increased the work considerably. In the order of their frequency the causes are: (1) new taxing programs; (2) war and postwar conditions; (3) expanded school facilities; (4) federal aids to education; (5) lack of clerical and other help.

From the evidence which presents itself the district clerk in New Jersey generally is well equipped to perform the duties of his office. His qualifications do not follow an upward or downward curve in relation to the size of the school district but remain rather uniform.

Although there is a great variation in the range of salaries in similar districts, yet a definite relationship is established between the number of school employees and the salaries of the district clerks.

Practically all full-time district clerks receive higher salaries than the part-time clerks even though in some cases the number of employees in the full-time clerk's district is fewer than in the part-time clerk's.

Far more salaries have been increased during the period from 1929 to the present than decreased or remained the same.

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[3] Monroe, Walter S., editor, *Encyclopedia of Educational Research*, The Macmillan Co., 1941.

[4] Heer, A. L., "The Present Status of Business Executives in the Public Schools of the United States in Cities of 25,000 or More Inhabitants," Kent (Ohio) State Normal Univ., 1928.

[5] Marberry, J. O., "The Administration of Public Education in Centralized and Co-ordinated Schools," University of Texas Bulletin, No. 2810, 1928.

[6] Smith, H. P., "The Business Administration of a City School System," Contributions to Education, No. 197, Teachers College, 1925.

The Principal and the Clerk

In some instances the supervising principal is the legally appointed district clerk. There are other districts where a system of dual control exists, the district clerk assumes all financial and business responsibilities, while the supervising principal devotes his full time to the educational affairs and both are directly responsible to the board of education.

Other situations exist in which the secretary to the supervising principal is the appointed district clerk, responsible to him in part, yet also directly to the board of education. There are district clerks in some of the smaller communities who hire teachers directly, select textbooks and in general "run" the school, with the exception of teaching.

District clerks in general perform many other tasks than those specifically prescribed in the School Laws of New Jersey.

The author's single recommendation is that boards of education specify definite spheres of influence and duties of the district clerk and the supervising principal. This action would act both as a preventive and remedial measure in the field of personnel problems and would lend itself to a more harmonious and efficient working of both officers to the end that boys and girls will profit most from the funds made available for their education.

A composite picture of the district clerk in the state of New Jersey: The average district clerk in the state of New Jersey is by no means an average person. He is a married man and a long-time resident of his community. He has attended high school and has children who attend the public schools. He is engaged in a profession, clerical work, or business and considers the district clerkship a part-time job. He was appointed by the board of education and has held the position for about 12 years as did his predecessor. He is not a member of the board, but is the business administrator of the school district. His office supplies are furnished by the board of education, but, strange to say, he has not yet been supplied with an office safe. The public and the board of education have great faith in his integrity and efficiency in handling the business affairs of the district. No local auditor inspects his books. He is satisfied that his duty is to act as secretary to the board of education and to be immediately responsible to that body. He believes that a district clerk should be skilled in accounting and typing. In addition he believes that he should have had business experience; should possess honesty, common sense, tact, the ability to get along with people, and a knowledge of school law. The board must often seek his advice in the sphere of finance.

What a Superintendent Looks for in New Teachers

Arthur W. Ferguson [1]

The school superintendent as he interviews the candidate for a teaching position or as he appraises the work of the new teacher during his first visits to her classroom is looking for: (1) personal qualities favorable for success in teaching; (2) attitudes that identify the teacher as a member of a great profession; (3) breadth of general education; and (4) evidences of a functional type of preparation for her work as a teacher.

Without attempting to oversimplify this matter of personal qualities the superintendent is looking for the teacher who is attractive to children. Voice, dress, patience, an innate sense of fairness — the ingredients are many, but for the teacher who attracts children analysis of her personal qualities is unimportant.

What attitudes identify the professional teacher? I would place at the head of the list a genuine belief that teaching is a respected calling. Can there be success in teaching without high consciousness of a service motive? A superintendent feels a keen sense of disappointment in a new teacher who is apologetic for her profession.

The school administrator is seeking eagerly these days for the teacher who believes that whatever makes for the development of children is part of the job.

Theodore Roosevelt once stated that whoever belongs to a profession owes something to that profession. The superintendent is delighted with the new teacher who quickly joins professional groups within her teaching interests, and then assumes leadership and responsibility in these professional organizations.

The most hopeful attitude in the new teacher is recognition of the need for help and the intelligent acceptance and use of supervisory services. The new teacher with this attitude can influence the pattern for a helpful in-service program for all teachers within the system. Their eagerness to improve, their selection for leadership in committee and workshop activities is professional leaven for their older and more settled colleagues.

How important it is for teachers to be alert to the world about them whether it be UNO or Dick Tracy. This surely is the basis for any scheme of general education. The superintendent is looking for teachers who live in the same world with children and youth.

Some acquaintance with great literature, at least an elemental knowledge of the principal scientific achievements, and some idea of the most important eras and movements in the story of man's progress through the ages constitute the minimum cultural area in the general education of the teacher.

There is another aspect of general education so important for teachers. Superintendents are looking for new teachers who have had rich educative experiences beyond the academic shades. Travel, summer employment in other fields, community work, church work — these are suggestive of nonacademic activities which contribute so vitally to the general education of the teacher.

Superintendents are constantly looking for evidence in new teachers of a functional type of preparation for their chosen calling.

Superintendents are looking for evidence that new teachers know how to apply methods learned in presenting subject matter. The superintendent is looking for demonstration of know-how in teaching.

Prospective teachers need experiences in the managerial side of their craft in actual classroom situations. Attendance registers, records, reports, interviews with parents, techniques of home room control can be made less formidable for new teachers if such experiences are provided in the training period. Every superintendent has seen new teachers stalled by inability to cope with the pure mechanics of the job.

Another type of functional preparation a superintendent seeks in the record of the new teacher is experience in out of class activities with children. Student teachers should have opportunities to organize and conduct school excursions, to direct intramural athletics, to supervise noon activities for pupils. The opportunity to work with groups of children in areas of natural interest is functional preparation for teaching.

How may we produce in greater numbers the new teacher the superintendent seeks? Only through the co-operative efforts of the colleges, school administrators, and state departments of education. In my judgment, no one has a greater responsibility for the recruitment of suitable young men and women for the teaching profession than do the superintendent of schools and the high school principal.

The various co-operative movements now under way in a number of the states are calculated to produce more new teachers of the type superintendents are seeking. The effect of some of these co-operative efforts is already reflected in improved classroom service. Better teachers for better schools is a co-operative project.

[1]Superintendent of Schools, York, Pa. Read before the New York City Conference of American Association of School Administrators, March 6, 1946.

AMERICAN EDUCATORS TO JAPAN

A commission of 11 educators, headed by Dr. Geo. D. Stoddard of the New York state department of education, has been sent to Japan to advise General Douglas MacArthur and the American army staff, and through these the Japan ministry of education, on technical matters in relation to the reorganization of the Japanese educational program to be followed during the period of the allied occupation. A group of 14 educators will accompany the commission as advisers. Representatives of the Office of Education, of the army and of the state department will supply the groups with liaison, secretarial, and other services. It is expected that the Commission and its associated experts will advise the Japanese on programs in the various fields from nursery schools to the university, and from library to adult education.

The Schools of Clarksdale Study Mississippi's White Gold

H. B. Heidelberg[1]

For several generations the production of cotton has dominated the economy of the Mississippi Delta, the soil of which is superbly adapted for growing this product. In years of bountiful production and good prices, cotton planters and all types of business in the Delta flourish abundantly; money is plentiful, and is spent lavishly. In years of restricted demand and low prices, planters frequently "go broke," and business is poor. The ups and downs of the cotton industry have been aptly expressed by a Memphis cotton buyer, as follows:

> Cotton is the overcoat of a seed that is planted and grown in the southern states to keep the producer broke and the buyer crazy. The fiber varies in color and weight, and the man who can guess the nearest to the length of the staple is called a cotton expert by the public, a fool by the farmer, and a poor businessman by his creditors.
>
> The price of cotton is fixed in New York and goes up when you have sold, and down when you have bought. A buyer working for a group of mills was sent to New York to watch the cotton market, and after a few days' deliberation, wired his firm to this effect: "Some think it will go up; some think it will go down. I do, too. Whatever you do will be wrong. Act at once."
>
> Cotton is planted in the spring, mortgaged in the summer, and left in the field in the winter.

The increase of cotton production in foreign countries and the development and rapid expansion of rayon and other synthetic fibers during the past 10 or 15 years constitute a menance of first magnitude to cotton growing as a profitable industry in the South, and especially to the Mississippi Delta, which is famed for its production of long-staple cotton.

A Comprehensive Study

For four months during the school year, 1944–45, a comprehensive, organized study of all phases of cotton was made by the students of the junior and senior high schools of Clarksdale, Miss., which is in the heart of the Delta.

The study was conducted under the conception that a primary function of education is to acquaint the students and the people with their immediate environment, the significance and opportunties of the economic system in which they live, and with the changes being effected and impending in the basic industry of the community.

The procedure followed in the study of cotton was on a unit basis, so planned and executed as to tie in with and be made a part of the content of each and every subject in the curriculum, and to provide participation and purposeful activity by all the students. Under the direction of C. S. McGivaren, high school principal, plans were formulated and executed according to the following outline:

1. *Organization.* Two faculty committees, one from the junior high school staff and one from the senior high school staff, were appointed to work out an outline of the topic so that it might be considered to best advantage by the student bodies of the two schools.

How Teachers and Students Co-operated

2. *Faculty Committee Procedure.* The committees met several times and finally worked out a series of what they termed "problems" or "topics" to be considered. At the same time they made a list of suggested activities for the different departments, and assigned temporarily the problems to the departments in the schools whose work seemed most nearly in line with the nature of the material most likely to be touched upon in considering each of the different problems. The committees then presented this outline to the entire faculties for suggestions and approval. Following faculty approval, eight of the leading planters and businessmen of the county were invited to have lunch with the committee members in order to get the businessmen's point of view. The outline was revised in the light of the suggestions from them.

3. *Preliminary Student Procedure.* The English classes composed letters, which the commerical department typed and mailed, to various organizations, bureaus, and individuals, requesting material which touched on this topic. At the same time, students in the English classes were preparing annotated bibliographies to be used when the actual study of the problem in its various aspects was begun. After materials began to arrive, they were handed to the librarian, who was responsible for their arrangement and their safekeeping and proper use.

The central feature of the cotton exhibit represented King Cotton and his children and illustrated the various uses of cotton for garment making, hospital use, etc.

How Materials Were Organized

4. *Classroom Procedure.* Within the various classes discussions as to the various subheadings under the topics, proper steps to follow in gathering the facts, and other preliminary steps to be taken, were formulated by the classes as a whole, and each class devised its own method of procedure. In most classes, a detailed outline was prepared and subtopics under the main heading were assigned to smaller committees for detailed research and study. As these committees brought back their reports, the findings were presented to the individual classes and were checked for accuracy against the findings of similar committees. When a class had completed its study of a problem, its findings were summarized in outline form and were thereupon transferred to charts, size 4 by 6 feet. Thus the material was made accessible to the students in each class and to the student body as a whole.

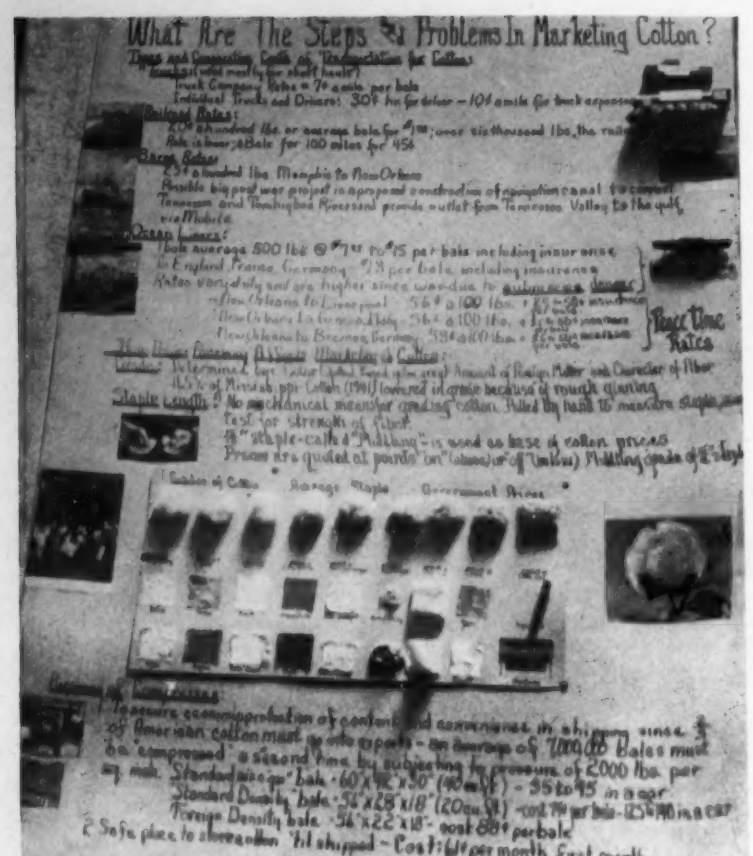
5. *Special features* of the study included a variety of additional activities:

a) *Motion Pictures.* We were able to use very profitably two motion pictures which were shown to the entire junior-senior high school student body. One of the films, "King Cotton," was purchased and given to the schools by the local cotton oil mill, the Planters Manufacturing Co. The other film, which was provided by the Hopson Planting Co., illustrates the mechanical cotton picker in operation.

Authoritative Speakers Addressed Students

b) *Outside Speakers.* At the suggestion and with the help of cotton planters and businessmen who were called in as consultants, five assembly programs were provided. Speakers on these occasions were: (1) Hudson Kyle, cotton planter operating several thousand acres of cotton in Coahoma County; (2) Ed. Lipscomb, of the National Cotton Council; (3) Dr. Clarence Dorman, of the Mississippi State Experiment Station; (4) Francis Gardes, of the Stoneville Experiment Station; (5) Dr. A. L. Ward, of the National Cottonseed Crushers Association of Dallas, Tex.

[1]Superintendent of Schools, Clarksdale, Miss.



The preparation and marketing of cotton and cotton products were described and illustrated in large charts prepared by upper grade students.

c) *Field Trips.* As various classes and departments studied the different topics, committees, classes, and departmental groups visited and observed the various types of cotton operations, such as plantations, oil mills, gins, compresses, offices of cotton factors, and cotton buyers.

d) *Three Student-participation Assembly programs.* At the conclusion of the study, students from the various classes, using the big 4 by 6 feet charts, on which they had made an outline of their findings, made talks to the entire student body, so that every student had an opportunity to find out what had been done in all classes and departments of the school.

The Climax of the Study

e) *The Exhibit.* On May 18, the various departments assembled all of the special projects which had been prepared by the individual students and by the committees of students, and incorporated them, together with the big charts mentioned previously, into a mammoth and spectacular "Land O' Cotton" exhibit in the high school gymnasium. The response, as indicated by the vast throng of visitors and their enthusiastic expressions of approval and commendation, was most gratifying.

f) *Publicity.* During the four-month period of research, study, acquisition of cotton materials and products, and preparation for the cotton exhibit, intense interest by parents, cotton planters, merchants, cotton buyers, and factors, and processors of cotton products was developed and stimulated by a steady stream of publicity from the *Clarksdale Daily Press,* the *Clarksdale Daily Register,* and the Memphis, Tenn., *Commercial Appeal*; the offices of the Delta Council and the National Cotton Council, the state superintendent of education, and by the bulletins to parents from the superintendent of the Clarksdale schools.

In order to provide public appraisals of the Cotton Unit by the local daily papers, and as illustrative of desirable publicity obtained for the Clarksdale schools, two excerpts are quoted from two feature articles published.

The Clarksdale Daily Register — summarized the study in its news columns:

Climaxing perhaps in continuity of purpose other excellent annual exhibits by the Clarksdale Junior-Senior High School was the one which last night attracted many hundreds of people to the high school gymnasium.

Using as the central theme of the exhibit the vital Delta commodity, cotton, which had been studied in some of its phases by the various departments and classes of the school, a uniform result was obtained which was informatively absorbing.

Centering the large gymnasium were the great outline charts, made by the students and used by them for a series of assembly period programs when their findings were passed on to the schools as a whole.

Bales of cotton, including gin, foreign density, and standard density bales, were used as a portion of the decoration. As a lighter decorative note, King Cotton and his court were portrayed in almost life-size figures on a long table set in the center of the semicircular outline charts.

Around the walls of the gymnasium the mathematics, history, home economics, and other classes presented their views on the subject of the "white gold." The mathematics classes displayed posters carrying out geometric designs in cotton. American and world history students gave a summary of cotton by exhibiting cleverly constructed models of the first gin and the first compress and bringing the story to the present by displaying samples of the new uses of the commodity in the making of plastics which are stronger than steel, and other articles of wide variety and use. Small plows of various types, made by the dextrous fingers of the students, were on exhibit, while modern mechanized farm machinery was suggestively pushed to the foreground.

The home-economics classes cleverly demonstrated by their exhibit of cotton dresses, linens, curtains, hats, and children's garments the importance of the white fleece.

Long tables of bibliography proved the intensive cotton research which has been underway in the schools and the libraries during the current year.

Radio, airplane, and steamship enthusiasts presented excellent and intricate exhibits proving that none of these world facilities would be possible without the use of cotton.

Of particular interest was the fact that representatives of the *Cotton Trade Journal* were on hand to learn just what the Clarksdale schools are doing for the promotion of the South's number one industry.

(Concluded on page 82)

Master Lists and Suggested Methods of Storage of Equipment for the Course in High School Physics

*Clarence Wilson Greene, Ph.D.**

In the January and February, 1946, issues of THE AMERICAN SCHOOL BOARD JOURNAL the purpose and methods of this survey were explained and lists of equipment and suggested methods for the storage of equipment for the course in high school chemistry were given.

B. Equipment Lists and Suggested Plans of Storage for Physics

The discussion in this article will be limited to the field of high school physics.

Comprehensive results for storage of physics equipment for students' laboratory work and for instructors' demonstrations were secured through merging the recommended lists of five state departments of education and a widely used text and laboratory manual in high school physics. This master list was found to provide adequate coverage when checked against several other high school physics texts and laboratory manuals, and the list prepared by one of our largest American producers of physics apparatus for use with each of four of the most widely used physics textbooks and laboratory manuals.

The maximum number, or quantity, of each item appearing on any of the lists was recorded and used in the computations.

The results were analyzed and organized for class groups of the following sizes: (1) 20 students to 24 students, inclusive; (2) 13 students to 19 students, inclusive; (3) 12 students, or fewer.

The complete list of equipment has been segregated in two groups: (I) stock room equipment, including chemicals, battery materials, glassware, and other materials; (II) apparatus to be kept in apparatus storage cases in the laboratory.

Storage of Chemicals, Battery Materials, Glassware, and Other Materials in Stock Room Storage

Maximum amounts of the items are listed in column I for 20 to 24 students, in column II for 13 to 19 students, and in column III for classes up to 12 students.

ITEMS	I	II	III
Acetemide, pure crystals	1 oz.	1 oz.	1 oz.
Acid, citric	1 oz.	1 oz.	1 oz.
Acid, hydrochloric, C.P., concentrated	1 lb.	1 lb.	1 lb.
Acid, nitric, C.P., concentrated	1 lb.	1 lb.	1 lb.
Acid, sulphuric, concentrated			
Alcohol, denatured, Ethel, 95%	8 lb.	6 lb.	4 lb.
Ammonium hydroxide, pure, concentrated	2 lb.	1 lb.	1 lb.
Ammonium nitrate, pure	2 lb.	2 lb.	1 lb.
Ammonium sulfate	2 lb.	1 lb.	1 lb.
Battery B, 45 volts Battery, Feniell Cell, gallon size, complete Battery, Feniell Cell, quart size, complete Battery, demonstration students' with tumbler, porcelain top, 13 elements Battery, dry cell, Burgess' Little Six, 1.5 volts Battery, dry cell, standard size, 1.5 volts Battery, Samson No. 2 Battery, storage, 6 volts Battery, Voltaic, students' single fluid	select 60	48	30
Battery jars, 4" x 5" Battery jars, 5" x 7" Battery jars, 7" x 15"	select 40	30	20
Beakers, Pyrex, with lip, 100 c.c. Beakers, Pyrex, with lip, 250 c.c. Beakers, Pyrex, with lip, 400 c.c. Beakers, Pyrex, with lip, 600 c.c. Beakers, Pyrex, with lip, 1000 c.c.	select 48	40	36
Bottles, narrow mouth, glass stoppers, 4 oz. Bottles, narrow mouth, glass stoppers, 8 oz. Bottles, narrow mouth, glass stoppers, 10 oz. Bottles, narrow mouth, glass stoppers, 12 oz.	select 30	20	14
Camphor, refined, granulated	1 oz.	1 oz.	1 oz.
Candles, paraffin, in twelves	2	2	2
Carbon pencils (elements), flat form	4	3	2
Carbon disulphide	1 lb.	1 lb.	1 lb.
Copper elements	4	3	2
Copper, sheet, No. 20	3 sq. ft.	3 sq. ft.	3 sq. ft.
Copper sulphate	8 lb.	6 lb.	5 lb.
Cups, porous for student cells	4	3	2
Ether, sulphuric, pure crystals Ether	select 2 lb.	2 lb.	1 lb.
Evaporating dishes, Coors' No. 00A, 75mm. Evaporating dishes, Sillimanite, No. 000, 60 mm. Evaporating dishes, No. 3, 100mm.	select 30	20	12
Flasks, Pyrex, distilling, capacity, 125 c.c. Flasks, Pyrex, distilling, capacity, 250 c.c. Flasks, Erlenmeyer, with side neck, 250 c.c. Flasks, Florence, flat bottom, 250 c.c. Flasks, Pyrex, flat bottom, 500 c.c. Flasks, Pyrex, round bottom, 500 c.c. Flasks, Pyrex, round bottom, 200 c.c. Flasks, Pyrex, R.B., short neck, 500 c.c.	select 50	40	30
Funnels, 6" Funnels, glass, 75mm. dia. Funnels, glass, 100mm. dia. Funnels, glass, 65mm. dia. Funnels, thistle top, 30cm. stem	select 32	24	18
Glass tubing, 5mm. dia. Glass tubing, 5–7mm. dia., assorted Glass tubing, 4mm. dia. Glass tubing, 6mm. dia. Glass tubing, 7 & 8mm. dia. Glass tubing, 12mm. outside dia. Glass tubing, 25mm. outside dia.	select 24 lb.	20 lb.	16 lb.
Glycerine, C.P.	1 lb.	1 lb.	1 lb.
Graduates, cylindrical, 250 c.c. Graduates, cylindrical, grad. up & down, 100 c.c. x 1 c.c. Graduates, cylindrical, 500 c.c.	select 24	20	16
Lithium chloride, C.P.	1 oz.	1 oz.	..
Magenta	10 gm.	10 gm.	10 gm.
Mercury	24 lb.	16 lb.	10 lb.
Naphthalene flakes	1 lb.	1 lb.	1 lb.
Nickel ammonium sulphate, crystals, pure	4 oz.	4 oz.	4 oz.
Paraffin, solid	2 lb.	1 lb.	1 lb.
Potassium permanganate	4 oz.	4 oz.	4 oz.
Rubber tubing, ¼" Rubber tubing, white, 3/16"	select 24 ft.	18 ft.	12 ft.
Sealing wax, red, 4 sticks to pound	1 lb.	1 lb.	1 lb.
Sodium chloride, C.P.	3 lb.	2 lb.	1 lb.
Sodium chloride, C.P.	3 lb.	2 lb.	1 lb.
Sodium hyposulphite, pure crystals	1 lb.	1 lb.	1 lb.
Strontium nitrate, C.P.	1 oz.	1 oz.	1 oz.
Whiting	4 lb.	4 lb.	4 lb.
Zinc elements, amalgamated, flat form, 2cm. x 10.5cm.	3	2	1
Zinc sheet, 1/16" thick	3 sq. ft.	2 sq. ft.	1 sq. ft.
Zinc sulphate, pure crystals	3 lb.	2 lb.	1 lb.

Suggested Storage Methods

Method A. If the chemicals, glassware, battery materials and other materials are to be stored in a stock room, an open stock room unit of the following dimensions can be used:

Case No. 1

	Width	*Depth*	*Height*
Over-all dimensions	47"	12"	7'0"
Inside dimensions	44¼"	10¼"	6'5"

For most efficient service this case should have a solid back. Seven adjustable shelves in each case, utilizing one 16" height shelf space, one 10" height shelf space, four 8" height shelf spaces, one 7" height shelf space and one 6" height shelf space, may be used.

Four of such units will provide for group I (20 to 24 students); three units for group II (13 to 19 students); and two units for group III (up to 12 students).

Method B. If open shelf cases of greater depth, with solid backs, are preferred, for storage in the stock room, a case of the following dimensions may be used:

Case No. 2

	Width	*Depth*	*Height*
Over-all dimensions	47"	16"	7'0"
Inside dimensions	44¼"	14¼"	6'5"

Seven adjustable shelves are suggested for each case, utilizing one 16" height shelf space, one 10" height shelf space, four 8" height shelf spaces, one 7" height shelf space and one 6" height shelf space.

For single line storage, four of the units will provide for group I, three units for group II and two units for group III.

*Director of Educational Research, Kewaunee Mfg. Co., Adrian, Mich.

Method C. When it is desired to protect the equipment from dust and to have provision for locking the case, each of the following units provides superior adjustments.

Glazed Sliding Door Case No. 3

	Width	*Depth*	*Height*
Over-all dimensions	47″	16″	7′0″
Inside dimensions	44¾″	11″	6′5″

With seven adjustable shelves and lock.

Glazed Sliding Door Case No. 4

	Width	*Depth*	*Height*
Over-all dimensions	70″	16″	7′0″
Inside dimensions	67¾″	11″	6′5″

With seven adjustable shelves and lock.

Following shelf height spaces are suggested when using case No. 3 or case No. 4: one 16″ height shelf space, one 10″ height shelf space, four 8″ height shelf spaces, one 7″ height shelf space, and one 6″ height shelf space.

For single line storage, four No. 3 or three No. 4 cases provide for group I; three No. 3 or two No. 4 cases for group II, and two No. 3 or two No. 4 cases for group III.

By using two lines for storage on each of three of the eight shelves, one No. 4 case will provide storage for group III.

Method D. When some cupboard space and drawer space are desired in conjunction with shelf storage the following Case with 4 adjustable shelves may be substituted for *one* of the No. 1, No. 2, No. 3, or No. 4 cases indicated in method A, method B, or method C, for each group.

Sliding Door Case No. 5 with Double Cupboard and 3 Drawers

	Width	*Depth*	*Height*
Over-all dimensions	48″	24″	7′0″
Upper member	47″	16″	47″
Lower member	47″	23″	37″
2 drawers, each	21″	18″	4½″
1 drawer	44¼″	18″	4½″
1 double cupboard	45¾″	20″	18″

Storage of Physics Apparatus in Apparatus Storage Cases

ITEMS		I	II	III
Adhesion disk, glass, 75mm. dia.		1	1	1
Air pump & plate on one base, lever handle Air pump & plate, electrically driven, 110 volts, a.c.	select	2	1	1
Air pump plate with stopcock, lathe turned surface, 27cm. dia.		1	1	1
Air pump (hand), vacuum and pressure		7	5	3
Air pump tubing, ¼″		8 ft.	6 ft.	6 ft.
Air thermometer bulb, 50mm. dia., stem 30cm. long		12	8	4
Alcohol lamp, 4 oz.		20	16	10
Aluminum foil		2 in.	2 in.	2 in.
Aluminum pellets		8 lb.	6 lbs.	3 lb.
Ammeters, a.c., portable laboratory type, bakelite case, 3 amp. Ammeters, a.c., portable laboratory type, bakelite case, 10 amp. Ammeters, a.c., portable laboratory type, bakelite case, 1 amp. Ammeter, d.c., low reading Ammeter, d.c., triple range Ammeter, d.c., model 489, 0–10 amps. Ammeter, d.c., Weston, 30 & 3 amps.	select	5	4	3
Ampere's frame apparatus Ampere's rule apparatus	select	2	1	1
Archimedes' apparatus Archimedes bucket & cylinder	select	6	4	2
Bacchus illustration, two 4-oz. bottles connected by bent glass tube		1	1	1
Balances, Cenco Trip, 6 agate bearing Balances, demonstration	select	25	19	11
Balances, laboratory, agate bearing, capacity 2000 gms., sensibility 0.05 gm., 10 gm. rider, with support for specific gravity for Balance, triple beam, agate bearings, bakelite pan, 0.05 gm. sensibility, 610 gms. capacity. No additional weights needed.	select	5	3	2
Balances, spring, 250 gms., 8 oz. Balances, spring, 15 kilograms Balances, spring, 2000 gms. in 25 gm. divisions, 64 oz. in 1-oz. divisions	select	50	32	20
Ball and ring, to show expansion due to heat		1	1	1
Ball, brass, drilled ¾″ Ball, brass, drilled & turned, 1″ dia. Ball, hardwood, drilled, 1″ dia. Ball, iron, drilled, ¾″ dia. Ball, iron, drilled & turned, 1″ dia. Ball, lead, drilled, ¾″ dia. Ball, steel, ¾″ dia. Ball, wood, drilled, ¾″ dia. Ball, wood, drilled, 1½″ dia. Ball, steel, with eyelets	select	80	48	30
Bar, compound, for unequal expansion		1	1	1
Barometer, aneroid, metric & Eng.		7	5	4
Barometer, mercurial, metric & Eng. scales with Vernier, Hg. column exposed, milk glass reflector and electrical contact		2	2	1
Barometer tube, thick wall, 80cm. long, with Hg. well & pipette, graduated in mm.		12	8	5
Bell, electric, 2½″ gong Bell, in Vacuo, with jar & suspended bell	select	14	9	6
Bell jar, hand & bladder Bell jar, 1 gal., glass stoppered Bell jar, 2 gals., knob top Bell jar, straight form, knob top Bell jar, open top, 6″ x 11″	select	4	3	2
Block, friction Block, wood, rectangular, loaded, 5 x 5 x 10cm. Block, wood, rectangular, water proofed, 7.5 x 7.5 x 38cm.	select	8	5	3
Blowpipe, brass, 8″		12	12	12
Board, drawing		2	1	1
Boiling point of alcohol tube		1	1	1
Boyle's law apparatus, j tube form, adjustable funnel, tube & glass stopcock Boyle's law apparatus and air thermometer	select	5	3	2
Bucket & cylinder, Archimedes' principle		1	1	1
Bucket, catch, aluminum with handle, 6.5cm. x 8cm., capacity 250 c.c.		12	7	5
Bunsen burners, with needle valve gas control with wing tops (if gas available)		24	20	16
Calipers, micrometer, 25mm. limit		3	3	2
Calipers, Vernier, 10cm. in c. use		3	3	2
Calorimeters, double wall, fiber ring Calorimeters, drawn polished aluminum, 12.5cm. high, 7cm. dia. Calorimeters, electrical, quantitative proof of Joule's law to operate on 110 volts, includes accessories Calorimeters, nickeled brass, 75 x 125cm., with stirrer & cover	select	4	3	2
Candles, standard, Sperm Candles, 12 S	select	4 doz.	3 doz.	2 doz.
Camera Obscura (pinhole)		1	1	1
Can, overflow, al., 125cm. high, 7.5cm. dia.		13	9	6
Candle support for 1 candle Candle support for 4 candles	select	6	6	6
Capillary tubes, set of 7 mounted Capillary tubes and reservoir	select	14	9	6
Cartesian diver, set complete		1	1	1
Cathode ray tube, to show heating effect Cathode ray tube, to show deflection effect	select	2	2	2
Catskin, half of		6	4	2
Center of gravity apparatus, 15cm. across		1	1	1
Centrifugal globe		1	1	1
Centrifugal hoops, two metal (mounted) rings, 20cm. dia.		1	1	1
Chladni's plates and holder, sets of		1	1	1
Choke coil and resonance coil		1	1	1
Clamps, Burette Clamps, condenser, large size Clamps, for meter sticks Clamps, knife edge Clamps, Mohr's Brass, 2″ x ¾″, pinchcock Clamps, pendulum, metal, length 25cm. Clamps, right angle Clamps, table, 4″ Clamps, tension Clamps, test tube, Stoddard's Clamps, Universal, with swivel	select	56	38	27
Cohesion figures, 4 wire frames with clay pipe for soap bubbles Cohesion plates, glass, 7.5cm. x 7.5cm.	select	2	2	2
Coil, primary and secondary for induction effects		2	2	2
Collision apparatus		1	1	1
Color charts, set of		1	1	1
Commutators, knife switch type, porcelain base		9	6	4
Compass, 10mm. Compass, 16mm. Compass, 25mm. Compass, 30mm. Compass, 50mm.	select	40	30	20
Composition of forces, apparatus, circular metal disk; 3 spring balances		6	4	2
Compton chart of electromagnetic radiations		1	1	1
Condensers, Liebig, 400mm. Condenser plates, pairs of Condenser plate attachment for electroscope Condenser straight jacket, 400mm.	select	7	5	4
Conductivity of solutions apparatus Conductivity of water apparatus, funnel 12cm. dia.	select	2	2	2
Conductometer, 4 rods, mounted to show conductivity in brass, al., cu. & fe. Conductor, cylindrical Conductor, spherical Conductor, ellipsoidal	select	3	3	3
Connectors, double brass		27	20	12
Convection apparatus, box with chimneys		1	1	1
Cord, lamp		30 ft.	20 ft.	15 ft.
Cork, borers, 6 in set		1 set	1 set	1 set
Cork borer, sharpener		1	1	1

ITEMS		I	II	III
Cork dust		4 oz.	4 oz.	4 oz.
Corks, quality XXXX, Nos. 0–11, ⅜″ to 1 1/16″	select	4 gross	3 gross	2 gross
Corks, assorted, Nos. 1–10, XXX				
Corks, assorted, Nos. 10–20, XXX				
Crooke's tube, 20cm. long with Maltese cross for shadow effect		1	1	1
Cubical expansion apparatus		1	1	1
Cup, Tantalus, 15cm. high		1	1	1
Cylinders, al. with hook, 7.5cm. x 2.5cm.				
Cylinders, hollow with glass cover				
Cylinders, metal sets for specific gravity				
Cylinders, solid aluminum				
Cylinders, solid brass				
Cylinders, solid copper	select	18	12	8
Cylinders, solid steel				
Cylinders, waterproofed wood				
Cylinders, "weight of air," aluminum				
Cylinders, "weight of air," brass, 7cm. dia.				
Cylinders, 15″ x 2″				
Density apparatus, maximum for water		1	1	1
Density block with sinker		2	2	1
Dewpoint apparatus, polished nickel plated cylinder and aspirator bulb, with glassware		7	5	3
Diffusion of gas apparatus				
Diffusion apparatus, including porous cup and glass tube	select	2	2	2
Dipping needle, 8cm., mounted with graduated arc		1	1	1
Discharger		1	1	1
Disks, acoustic & color, giving all tones of diatonic scale				
Disks, color, set of 16 disks, in two sizes with graduated reference disks	select	1	1	1
Dish, crystallizing, glass, 10cm. x 5cm.		1	1	1
Dish, flat bottom		1	1	1
Dynamo hand power, dissectible		1	1	1
Electrical whirl		1	1	1
Electrolysis apparatus, battery jar type, complete with jar		1	1	1
Electromagnetic attachment for St. Louis motor		1	1	1
Electromagnets				
Electromagnets, lifting				
Electromagnets, V fork with removable spools and armatures	select	12	8	5
Electrophorous, 15cm. x 15cm. plate				
Electroscope, flask form with aluminum leaves				
Electroscope, metal case and new style leaf	select	7	5	3
Electroscope, pith ball				
Ellipsoidal conductor		1	1	1
Emory, fine sheets		1	1	1
Equilibrium tubes, mounted		1	1	1
Eye, human, model of		1	1	1
Faraday bag, mounted on insulating stand, 15cm. high		1	1	1
Faucet, Fuller-Ball, cut to show working parts		1	1	1
Files, triangular, 5″ or 6″		12	12	12
Filter paper, 11cm. diameter		12 pkg.	12 pkg.	12 pkg.
Fish line, card of		1	1	1
Flannel pad		9	6	4
Fluoroscope, with removable screen and viewing box		1	1	1
Foil, aluminum for electroscope		1 book	1 book	1 book
Galvanometers, D'Arsonval, jeweled pivots, bakelite case, sensibility one megohm				
Galvanometer, portable type	select	20	14	9
Galvanometer, frame, bakelite				
Galvanometer, tangent				
Galvanoscope, porcelain base		8	5	3
Gas engine model, 4 cycle, with miniature bulb to indicate spark, with puppet valves, and timer and spark retard		1	1	1
Gauze, wire, asbestos center, 20 mesh, 5″ x 5″	select	12	8	5
Gauze, wire, 16 mesh, 4″ x 4″				
Geissler tubes, set of 6, varying fluorescence		1	1	1
Glass stirring rods, 8″ x 3/16″		8	5	3
Governor, Watt's form		1	1	1
Guinea feather tube, 500 c.c. x 5 c.c.		1	1	1
Gyroscope, simple form		1	1	1
Hall's cars, cone bearing, length 17.5cm.		6	4	3
Hand and bladder glass		1	1	1
Holder, Lenz, for optical bench		1	1	1
Holder, spring & weight		5	3	2
Hooke's law apparatus, mirror and scale and support		1	1	1
Horseshoe core, soft iron		6	4	3
Hydraulic ram, glass model		1	1	1
Hydraulic press, glass model		1	1	1
Hydrometer, battery				
Hydrometer, constant volume				
Hydrometer, constant weight				
Hydrometer, demonstration	select	20	16	12
Hydrometer, heavy liquids, 30cm. long				
Hydrometer, light liquids				
Hydrometer, universal				
Hydrometer jars, 2″ x 12″				
Hydrometer jars, 30cm. high, 50 cm. dia., with lip	select	10	7	5
Hydrometer jars, 2″ x 15″, flanged top				
Hygrometer, thermometer & cistern, Mason's wet and dry bulb	select	2	2	1
Hygrometer, wick				
Hypsometer, seamless metal boiler, complete with tube, dipper, tripod & gauze		1	1	1
Illuminator arc, 110 volts		1	1	1
Inclined plane, 120cm. long, 12.5cm. wide, with pulley and graduated arc	select	6	5	3
Inclined plane, 5 meters long, with ball for demonstration				
Index of refraction plates		6	5	3
Induction coils				
Induction coils, demonstration, 6mm. primary and secondary, mounted, for vertical and horizontal positions	select	9	7	5
Induction coils, ¼″ spark				
Induction cylinders, fitted with two rods carrying pith balls				
Inertia ball, with hooks, 75mm. dia.		1	1	1
Iron filings, 4-oz. bottles, in shakers	select	5 lb.	4 lb.	3 lb.
Iron filings, in bottles with sifter tops				
Jack screw model		1	1	1
Keys, single contact, simple tandem, 7.5cm. x 12cm. base		6	5	3
Lamp board		1	1	1
Lamp, carbon, 32 C.P.				
Lamp, chimney, student				
Lamp, standard, incandescent, 110 volts tested for candle power, approx., 48 c.p.	select	6	6	6
Lamp, Tungsten, 25 watts				
Lamp, Tungsten, 40 watts				
Lamp, 1 lb. charcoal				
Lead elements, flat form, 22mm. x 125mm.		6	4	2
Lead shot	select	5 lb.	5 lb.	5 lb.
Lead simpers				
Lenses, concave, 10cm. focus				
Lenses, convex, 10cm. focus				
Lenses, convex, 15cm. focus				
Lenses, convex, 30cm. focus	select	48	30	20
Lenses, convex, 50cm. focus				
Lenses, double convex, 38mm. dia., 10cm. focus				
Lenses, double convex, 15cm. focus				
Lens, reading glass, 2″ handle		6	5	3
Lens supports for meter stick		8	5	3
Lens supports for optical bench		9	5	4
Lever holders		24	15	10
Leyden jar, dissectible		1	1	1
Leyden jar, pt., 1.5cm. x 7.5cm.		6	5	3
Light box, windows, ground glass screen, for photometric & lens work, for housing light source		4	3	2
Linear expansion apparatus, lever type with steam jacket		2	2	1
Linen testers		6	4	3
Lodestone, piece of strongly magnetic iron		1	1	1
Lung, demonstration model		1	1	1
Magdeburg hemispheres, mounted		1	1	1
Magnets, bar, 6mm. x 19mm. x 150mm.				
Magnets, bar, 50mm. long				
Magnets, bar, square, 15cm. x 1cm. x 1cm.				
Magnets, bar, rectangular, polished				
Magnets, steel, 15cm. x 1.9cm. x 0.7cm.				
Magnets, large U	select	64	40	28
Magnets, Bredking, 10cm. x 0.6cm. x 0.6cm.				
Magnets, horseshoe, 10cm. long				
Magnets, horseshoe, 15cm. long				
Magnets, U shape, 14cm. long				
Magnets, V shape				
Magnet boards		8	5	3
Magnetic needles		9	6	4
Magnetic screens, 6 in set, paramagnetic and diamagnetic, each piece 8 cm. x 8cm.		1 set	1 set	1 set
Manometer tubes, standard	select	8	5	3
Manometer tubes, set of in two different diameters				
Manometric flame apparatus, complete with mounted diaphram and cubical mirror to operate on rotator		1	1	1
Mechanical equipment of heat, tubes for		8	5	3
Medicine droppers		12	12	12
Mercury gauges		8	5	3
Meter sticks, English & Metric, maple, graduated to ⅛″ and 1mm.		30	21	16
Meter sticks for lens holder		8	5	3
Metric and English rules, maple, 12″		24	12	6
Metric chart, Bureau of Standards form		1	1	1
Metronomes		2	2	1
Microscope tube and scale		8	5	3
Milliammeters, a.c., 0–50 milliamperes		2	2	1
Mirrors, cylindrical, metal, 5cm. x 10cm.				
Mirrors, lacquered				
Mirrors, plane, 4cm. x 15cm.				
Mirrors, glass, concave & convex, 4cm. dia.				
Mirrors, 25cm. focus	select	48	30	20
Mirrors, glass, concave & convex, 10cm. focus				
Mirrors, metal, concave & convex, 10cm. focus				
Mirrors, plane, 6″ x 6″				
Mirrors, plane, 10cm. x 10cm.				
Mirror scales, with supports, polished nickel-plated mirror, with etched scale		6	5	3
Mirror supports for meter sticks		6	5	3
Mirror supports for optical bench		6	5	3
Motor, St. Louis, all metal base, spring clip magnet holders, flat adjustable copper brushes, with Field Magnets with a.c. & d.c. armatures	select	7	5	3
Motor, battery, enclosed, speed 2000 r.p.m., wound for 4 volts and 1.5 amps.				
Needles, darning	select	4 doz.	3 doz.	1 doz.
Needles, knitting, 15cm. long				
Newton's ring apparatus		1	1	1

ITEMS		I	II	III
Optical bench, including meter stick, supports, lens support, screen support, and object marker		1	1	1
Optical disk, etched metal, dial, complete with lenses	select	1	1	1
Optical disk, Hartyl, with diverging ray attachment & refraction tank	select	1	1	1
Organ pipes, with movable piston, all metal design, with adjustable mouthpiece		1	1	1
Osmosis apparatus, simple form	select	1	1	1
Osmosis apparatus, Lyon form	select	1	1	1
Paper, blueprint		1 pkg.	1 pkg.	1 pkg.
Paper, co-ordinate		1 pkg.	1 pkg.	1 pkg.
Paper sales, mounted on block				
Pascal's vases, precision form	select	1 set	1 set	1 set
Pascal's vases, with metallic diaphram	select	1 set	1 set	1 set
Pendulum and clamp, metal		2	2	1
Photoelectric cell & relay outfit, Weston's		1	1	1
Photometer, elementary	select	8	4	3
Photometer, box, Munsen's	select	8	4	3
Pinch cocks, screw compression		40	30	20
Pisa, leaning tower, model of		1	1	1
Pith balls	select	60	48	30
Pith balls, 5mm. & 6mm., with silk threads	select	60	48	30
Platinum wire in glass handle		1	1	1
Polaroid demonstration set, with 2 disks of polaroid		1	1	1
Pliers and nippers, side cutting		1	1	1
Prism, equilateral, 75mm. x 9mm.	select	16	10	8
Prism, equilateral, 75mm. x 25mm.	select	16	10	8
Prism, 75mm. with 28mm. faces	select	16	10	8
Prism, 60°, 75mm. x 9mm. thick	select	16	10	8
Prism, equilateral, 25cm. x 38cm.	select	16	10	8
Prism, wood, triangular, 5cm. long	select	16	10	8
Prism support blocks		4	4	2
Proof planes		6	5	3
Protractors, brass, 4¼"		7	5	4
Psychrometer, sling		1	1	1
Pulley cord, silk fishline		25 yd.	25 yd.	25 yd.
Pulleys, for inclined plane	select	42	30	20
Pulleys, bakelite, single	select	42	30	20
Pulleys, bakelite, single, 5cm. dia.	select	42	30	20
Pulleys, bakelite, double, 5cm. dia.	select	42	30	20
Pulleys, bakelite, triple	select	42	30	20
Pulleys, tackle block, 7.5cm. dia.	select	42	30	20
Pump, filter (glass aspirator)		1	1	1
Pump, force, glass, 37cm. long		1	1	1
Pump, lift, glass model		7	5	3
Push buttons, stamped metal, bronze finish		8	6	5
Quincke's tubes		1 set	1 set	1 set
Reading glass and screen		2	2	1
Receptacles, lamp, mounted on board		4	4	4
Radiometer, one set of vanes		1	1	1
Radiotron, U x 201A		1	1	1
Reaction wheel, glass (Newton's law)		1	1	1
Reflectors, parabolic		1 set	1 set	1 set
Refraction tank, with protractor		1	1	1
Resistance boards		6	4	3
Resistance box, 3 dial form R = 99.9 ohms	select	30	20	14
Resistance box, standard, bakelite case, 0.1 ohm to 111 ohms	select	30	20	14
Resistance, one ohm spool	select	30	20	14
Resistance, 1000 ohm spool	select	30	20	14
Resistance, coils, set of 8 for use with Wheatstone Bridge		4	3	2
Resonance tube, on metal base, with rod & piston		4	3	2
Rheostat, 10 ohms	select	6	4	3
Rheostat, 90 ohms, slide wire	select	6	4	3
Ring stands, 3 rings	select	24	18	16
Ring stands, support, 3 rings	select	24	18	16
Ring stands, support, 2 rings	select	24	18	16
Ring stands and clamp for ground glass screen	select	24	18	16
Rod, friction, hollow glass, 25cm. x 1.3cm.		6	4	3
Rod, friction, vulcanite, 25cm. x 1.3 cm.		6	4	3
Rod, friction, wax, 25cm. x 1.3cm.		6	4	3
Rod, soft iron, 4" x ¼"	select	12	8	6
Rod, soft iron, 15cm. x 1.2cm.	select	12	8	6
Rod, steel, 15cm. x 1.2cm.	select	12	8	6
Rod, wood, 1cm., square x 30cm. long	select	12	8	6
Rod, brass, for expansion, apparatus	select	12	8	6
Rotator, hand form, gear driven (Ratio: 11 to 1)	select	1	1	1
Rotator, hand rotator table	select	1	1	1
Rubber cord, for wave motion, 6mm. dia., 3 meters long		1	1	1
Rubber dam		1 sq. ft.	1 sq. ft.	1 sq. ft.
Rubber mallet		1	1	1
Rubber stoppers, 1 hole, No. 1	select	125	90	75
Rubber stoppers, 1 hole, No. 3	select	125	90	75
Rubber stoppers, 1 hole, No. 4	select	125	90	75
Rubber stoppers, 1 hole, No. 5	select	125	90	75
Rubber stoppers, 1 hole, No. 6	select	125	90	75
Rubber stoppers, 1 hole, No. 7	select	125	90	75
Rubber stoppers, 1 hole, No. 8	select	125	90	75
Rubber stoppers, 2 hole, No. 1	select	125	90	75
Rubber stoppers, 2 hole, No. 3	select	125	90	75
Rubber stoppers, 2 hole, No. 4	select	125	90	75
Rubber stoppers, 2 hole, No. 5	select	125	90	75
Rubber stoppers, 2 hole, No. 6	select	125	90	75
Rubber stoppers, 2 hole, No. 7	select	125	90	75
Rubber stoppers, 2 hole, No. 8	select	125	90	75
Rubber stoppers, 1 hole to fit calcium chloride tube	select	125	90	75
Rubber tubing, 1¼"	select	54 ft.	36 ft.	20 ft.
Rubber tubing, 3/16" x 1/16", pure gum	select	54 ft.	36 ft.	20 ft.
Rubber tubing, white, ¼" dia., 1/16" wall	select	54 ft.	36 ft.	20 ft.
Rubber tubing, white, ¼" dia., heavy wall	select	54 ft.	36 ft.	20 ft.
Rubber tubing, ¼" x ⅛", pure gum	select	54 ft.	36 ft.	20 ft.
Rumford's photometer		1	1	1
Scale, indicator, for tube & pointer		1	1	1
Screen, double slit	select	9	6	4
Screen, mount for optical bench	select	9	6	4
Screen, single slit	select	9	6	4
Screen, wire, mounted	select	9	6	4
Screen, metal, semicylindrical with slit	select	9	6	4
Screw disk, with 5 rows of holes		1	1	1
Second law of motion apparatus, plunger and spring type		1	1	1
Shot, copper		1 box	1 box	1 box
Shot, steel		6 lb.	4 lb.	3 lb.
Shot, lead		1 box	1 box	1 box
Sight meter for measuring foot-candles		1	1	1
Sifter		1	1	1
Silk pad		1	1	1
Sinker, lead, with hook		2	2	1
Siphon, arms, 20cm. & 30cm. long		5	3	2
Snips, metal, 2½" outside		3	3	3
Soft iron cone		1	1	1
Sonometer and wires	select	12	9	6
Sonometer, with attachment for inclined plane	select	12	9	6
Sonometer, weight tension type	select	12	9	6
Source of light, Mazda filament for 110 volts, d.c. and a.c.		1	1	1
Specific gravity bottles, 25 c.c.	select	6	4	3
Specific gravity bottles, 50 c.c.	select	6	4	3
Specific gravity specimens, set of 10		1	1	1
Specific heat apparatus, Tyndall's, 5 balls of different metals, rod for holding balls, cake of paraffin, tin molding pan, and rectangular support for paraffin cake		1	1	1
Specific heat roll, lead		1	1	1
Sphere, hollow conducting, 10cm. dia		1	1	1
Spinthariscope, Crooke's		1	1	1
Spiral spring for wave demonstration		1	1	1
Spirometer (seven-in-one apparatus)		1	1	1
Spoons, deflagrating		12	12	12
Springs and weight holders		8	6	4
Static machine, Wimshurst, two 12" plates		1	1	1
Steam engine, complete model, locomotive type, large size		1	1	1
Steam generator apparatus "A," no soldered joints, commercial boiler gauge	select	13	8	6
Steam generator, Cenco, pyrex	select	13	8	6
Steam trap, glass		3	2	1
Stirrup, wire, for holding small magnets 5cm. long		1	1	1
Stop clock	select	1	1	1
Stop watch, 6 jewel, 1/5 sec.	select	1	1	1
Support blocks		6 pairs	4 pairs	3 pairs
Supports, knife edge and lever holder	select	10	8	4
Supports, metal, with 4 candle holders	select	10	8	4
Supports, metal, with lamp sockets	select	10	8	4
Supports, sets of (tripod, rod & clamp)	select	10	8	4
Swinging flame apparatus		1	1	1
Switches, electric, double pole, single throw		12	8	6
Sympathetic electrical vibration apparatus (resonant Leyden jars)		1	1	1
Syphon, intermittent (Tantdus' cup)		1	1	1
Syringe, fire, glass with close fitting piston and tinder, 30cm. x 3cm.		1	1	1
Syringe, pressure, glass, 20cm. long		1	1	1
Tacks, small iron		2 pkg.	2 pkg.	1 pkg.
Tapeline, 100 ft.		1	1	1
Telegraph key	select	11	8	7
Telegraph key and sounder on one base	select	11	8	7
Telegraph Pony relay, 20 ohms resistance	select	11	8	7
Telegraph receiver, demonstration	select	11	8	7
Telegraph set, complete	select	11	8	7
Telegraph sounder, 4 ohms	select	11	8	7
Telephone receiver, demonstration form		5	3	2
Telephone transmitter, dissectible		1	1	1
Test tubes, annealed glass, 6" x ¾"	select	84	72	60
Test tubes, annealed glass, 8" x 1"	select	84	72	60
Test tubes, pyrex, 2cm. x 15"	select	84	72	60
Test tube brushes		12	8	6
Test tube supports, for 12 tubes		6	4	2
Thermometers (—10° to 110° C.), length 12cm.	select	26	18	12
Thermometers (0° to 200° C.)	select	26	18	12
Thermometers (110° C. and 220° F.)	select	26	18	12
Thermometers, maximum and minimum, self-registering	select	26	18	12
Thermometers, ungraduated	select	26	18	12
Thermostat, contact adjustable by metallic plate, with binding posts		1	1	1
Toricelli tubes, 80cm.		6	6	4
Transformer, demonstration		1	1	1
Triangles, pipe stemmed, 2"		12	12	12
Tripods, 5"	select	24	16	10
Tripod bases, weight 1.1 kg.	select	24	16	10
Tripod rods, 1.3cm. x 100cm.	select	24	16	10
Trough, pneumatic, iron, 4" x 7" x 10"		6	6	6

(To be concluded)

Public Relations and Bond Issues

Charles C. Mason[1]

On November 20 and December 4, 1945, Tulsa, Okla., voted by a large majority school bonds in the amount of $5,500,000. The bond proposals were submitted to the people by the board of education for the purpose of obtaining funds for the rehabilitation, modernization, and expansion of the school plant. Two elections were held because the Negro or separate schools are financed by a county-wide levy, while the white or majority schools are supported by a district levy covering a much smaller area. The November 20 election calling for bonds in the amount of one million dollars was for the Negro schools. Four and one half million dollars for the white schools was voted on December 4.

Preparations for the bond elections began in October, 1943, when the board of education asked a number of representative citizens to survey the physical needs of the schools. This group included merchants, financiers, attorneys, newspaper editors, and men who were experts in building construction. The purpose of the survey was to obtain a citizens' committee corroboration of the board's own knowledge of conditions relative to the physical needs of the schools. This committee made a report to the board of education on February 15, 1944.

[1]Superintendent of Schools, Tulsa, Okla.

Using Preliminary Survey Findings

Following this action, the board of education and the superintendent continued to investigate and to plan for the time when extensive rehabilitation and new construction would be possible. Meanwhile, the public was continually informed through the press concerning the physical needs of the schools and the probabilities of supplying these needs.

The public attention was called to the fact that school buildings, like many other types of buildings, could not be properly maintained during the war years. Faced with limited funds and with shortages of materials and man power, both in maintenance and teaching personnel, the Tulsa board of education had only one alternative: to attempt to maintain salaries of teachers and defer maintenance and rehabilitation with the exception of the most pressing, emergency items. Naturally, there is a limit to the length of time that necessary rehabilitation and expansion may be delayed. Half-day sessions in some sections of the community were seriously damaging the educational experiences of many children. Some cafeteria and kindergarten units were being housed in temporary frame structures. Lack of space was preventing many pupils from taking certain subjects.

These conditions and postponed rehabilitation, the board pointed out, were not entirely due to the nation's all-out war effort. There had been little new construction for Tulsa schools during the previous twenty years. In this same period, the city had almost doubled its population and had, like many other cities, felt the impact of new residents who came to work in wartime industries.

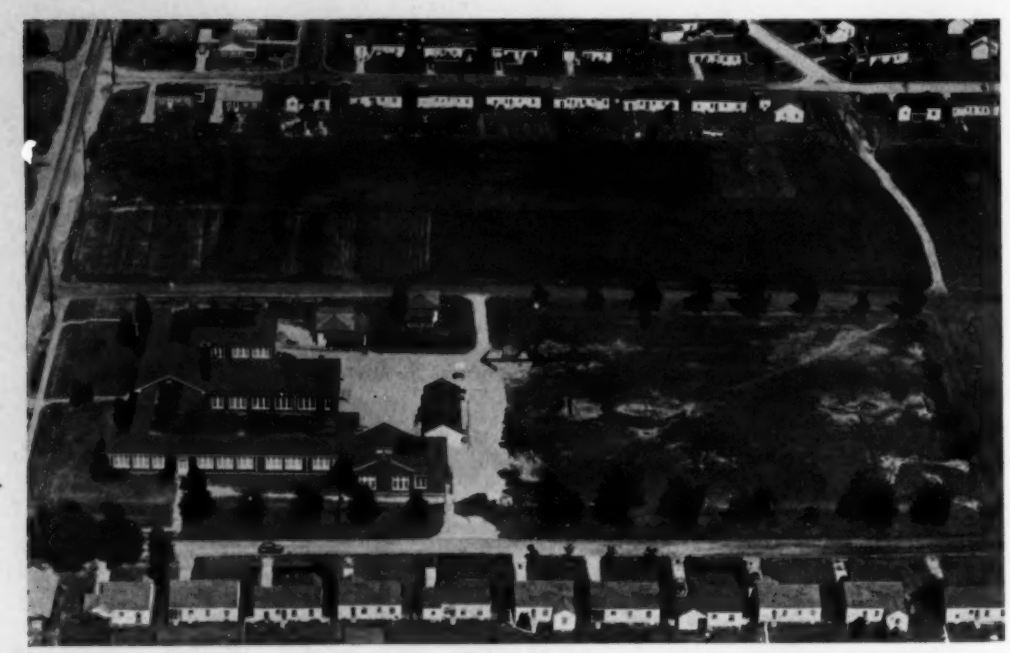
A Representative Committee Formed

Consequently, toward the end of the war the board of education renewed its efforts to inform the public regarding the physical needs of the schools. This second phase of the bond promotion began on June 14, 1945. At this time, the board of education asked a second group to form a Citizens' Committee for Postwar Plans for Tulsa Public Schools. This committee, like the first, was composed of men representing a wide variety of businesses and professions. Organized labor was well represented.

The committee subdivided itself into the following working groups: subcommittees on modernization, expansion, rehabilitation, and finance. Every property of the board of education was thoroughly inspected. Any type of technical help necessary was readily given the committee members by the superintendent and other employees of the board of education. For example, with the assistance of an engineer for the board of education, various

Will Rogers Senior High School, Tulsa, Oklahoma.

Although this is one of Tulsa's newest schools (opened in September, 1939), a rapidly increasing pupil population necessitates additions. An extension is planned for the northeast wing to include new science laboratories, home economics classrooms, manual arts shops, and standard classrooms.



Springdale Elementary School, Tulsa, Oklahoma.
The east wing will be extended south; six standard classrooms will be included. The temporary frame structures will be replaced by this addition. Temporary partitions in the auditorium-gymnasium will be removed and this room restored to the use originally intended.

tests were made covering artificial illumination and heating. Other tests were made by independent engineers. The committee was provided with demographic and attendance surveys by the school officials. During the progress of this survey, the public was adequately informed at timely intervals by the newspapers.

Because interest was running high and because the city and the county of Tulsa were planning street, water system, and road improvement bonds, the Tulsa Institute of Governmental Research published on October 1, 1945, a financial study. With respect to the three governmental units involved (the Tulsa board of education, the city of Tulsa, and the county of Tulsa), the following factors were analyzed: the amount of the present local debt, the rapidity with which it will be paid, the effect of new bond issues on the tax rate. This study was independently prepared. However, the board of education welcomed the publication of the analysis, because its findings showed that the school district's financial condition is sound, and that a bond issue would not place an undue burden on the public.

The Citizens Committee Report

Later, on October 16, 1945, the Citizens' Committee for Postwar Plans for Tulsa Public Schools made its report to the board of education. The report filled 65 typewritten pages and included general specifications for individual buildings. A detailed cost analysis was a part of the report. A total expenditure of $6,797,315 was recommended, approximately one million of which was for the Negro or separate schools. As in the case of the previous report of February 15, 1944, the board found that its own knowledge of conditions was generally substantiated by the second report.

The board of education, following its usual policy of public relations, informed the people of this report and recommendation by means of the local newspapers. There was little opposition to the plans of the board of education. News releases were in general favorably received by the public. There was evidence of a continual demand for up-to-date information on school plans, and the board of education through its employees was always aware of the desirability of meeting this demand.

As a part of its plan for giving a complete picture to the public, the board of education published 40,000 copies each of two brochures, one for the Negro and one for the white schools. These publications contained photographs and explanations of the salient physical needs of the schools. The various civic and professinonal clubs received copies, and distribution to the patrons of the schools was effected through the pupils, the P.T.A.'s, and the Boy Scouts. Posters carrying photographs were placed in downtown store windows.

How the People Approved

In addition to the help in giving information through the newspapers, the board was given "spots" by all the radio stations of Tulsa. A speakers' bureau composed of members of the board of education, employees of the schools, and other men and women made innumerable talks to P.T.A. meetings, civic and professional clubs. The expenses incurred in this public information campaign were defrayed by voluntary contributions of interested patrons and other citizens.

When the bond proposal was formally made by the board of education, the original recommendation of approximately seven million dollars was arbitrarily reduced because of constitutional limitations of bonded indebtedness existing in Oklahoma. The separate (Negro) school bond proposal of $1,000,000 carried by a 4 to 1 majority on November 20, and the white school bond proposal of $4,500,000 carried on December 4 by 14 to 1.

Such a vote of confidence was quite encouraging to the board of education and its administrative staff. The large favorable majority was more than adequate return on the investment of careful planning and sound public relations. The history of this experience demonstrates the validity of the maxim, "Give the people the light and they will find their own way."

INDEPENDENCE IN AMERICA

Our American form of society makes the capacity for independent thinking and deciding — as well as the ability to co-operate — a requisite of good citizenship. Opportunities for thinking and deciding and co-operating should be available to the pupil from the very beginning of his school career and should increase in frequency and complexity as he grows, until he can finally rely upon himself, and be relied upon, for intelligent self-direction in a democratic setting. — *Clarence R. Aydelott, Harris Teachers College, St. Louis, Mo.*

Cherokee Elementary-Junior High School, Tulsa, Oklahoma.
The two old buildings on the north will be razed and a modern junior high school will be erected at a cost of $300,000.

Co-operative Occupational Training

Nadine E. Miller[1]

Co-operative occupational training was introduced in five of the Kansas City, Mo., public high schools with the opening of the 1945–46 school year, as an extension of the standard high school curriculum to include on-the-job occupational training.

A select group of one hundred fifty high school seniors are spending approximately half of each day pursuing their regular high school courses, one of which is related directly to their employment; the other half day, or a minimum of 15 hours per week, is devoted to on-the-job occupational training. High school credit will be given for the time employed.

The program was set up under the direction of the Department of Vocational Education of the Kansas City schools. A co-ordinator for the entire program, and a school co-ordinator in each of the participating schools have been appointed and are active in directing the work.

The students were selected on the basis of their interests, aptitudes, school training, and personality records.

Home visits were made by the school co-ordinators to explain to the parents the co-operative training plan, the opportunities that it provided, and the responsibilities that participating students must assume. These home visits also provided the co-ordinators with definite information as to the interests and training needs of individual students.

The second phase of the school co-ordinator's work was the contacting of employers. This was carefully organized and planned to prevent duplicate calls which would result in a waste of time for the employers. Naturally the training needs of the students determined the types of employers to be contacted; however an effort was made to place students with as many different employers as possible, in the belief that widespread employer co-operation is desirable for the development of the program.

Some basic principles were formulated to use as a guide in presenting the program to employers. It was felt that such a procedure would allow sufficient freedom but at the same time result in a more uniform presentation. It was also agreed that the following policies should be adhered to in making employer contacts:

A clearing file would be maintained on all contacts so that a duplication of calls could be avoided.

The program should be presented as a part of the Kansas City high school curriculum.

Programs would be presented as an organized training plan having merit for both student and employer.

All training stations would be evaluated in terms of definite training criteria.

All initial contacts would be made through top management.

[1]Kansas City 6, Mo.

These girls, members of the office machines class of Central High School, Kansas City, Missouri, learn the techniques of operating dictaphones, calculators, and duplicating machines. Afternoons they are employed and receive on-the-job training.

Co-ordinators would secure certain types of information about the employers business before calling.

Widespread placement was preferred rather than placement with a few employers.

A uniform procedure also was followed in placing students on jobs. The original contact, of course, was made by the co-ordinator, but the student was required to make application through regular employment channels.

At the time of the initial contact with the employer a four-page mimeographed sheet setting forth the objectives, the basic principles of the plan, the rules under which the plan was to operate, and a progress rating blank was left with the employer. The objectives as stated were:

To provide opportunities for a select group of high school seniors to continue their high school work and at the same time prepare themselves for a job

To bridge the gap between regular classroom and occupational practice by providing on-the-job work experience

To aid both the employer and the student by giving additional training for the correction of weaknesses that become apparent on the job

The basic principles were listed as follows:

The student-learner should be considered as a regular worker subject to all employee regulations.

The student must work a minimum of 15 hours per week in order to receive high school credit. Hours of employment will be determined by the employer and school co-ordinator.

The student-worker must secure a Social Security number as any other employee.

The student-learner working on production of goods for use in interstate commerce must receive the minimum wages prescribed by the Fair Labor Standards Act unless official exemption has been granted.

The student should be paid a monetary wage comparable to that paid other beginners in the occupation.

The employer was asked to furnish, in so far as possible, a brief job description of the work which the student-learner would be expected to do. This would furnish the co-ordinator a basis for selecting the young worker, and also serve as a guide for the organization of related instruction that will be given in the school.

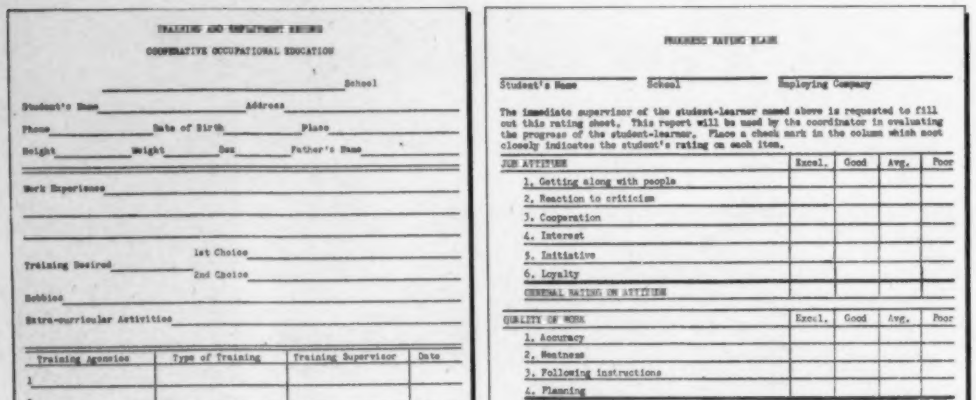
Students for this program are selected on the basis of their interests, aptitudes, and school training and personality records. It is recognized that mistakes may arise in the selection of workers. In such cases the co-ordinator will replace the young worker if corrective training is not effective.

The student-worker has many adjustments to make when he enters employment, most of which arise from his attitude aptitudes and personal characteristics. Since the purpose of this program is to help young workers solve these adjustment problems it is necessary for the co-ordinator to keep in close touch with the progress of the student on the job. This requires individual conferences with students as well as conferences with the students' immediate supervisors on the job.

The supervisor is asked to rate the student-worker periodically on the Progress Rating Blank, so that there will be definite information on which to work with the student in making necessary adjustments.

It is believed that a "Training Memorandum" which sets forth some of the general agreements between the employer, the school, and the young worker is desirable. One of the problems that employers have with young workers is getting them to assume responsibility. Some form of training agreement should impress upon both the student and his parent the degree of their responsibility.

It is understood that part-time employment



TRAINING AND EMPLOYMENT RECORD

COOPERATIVE OCCUPATIONAL EDUCATION

_____ School

Student's Name _____ Address _____

Phone _____ Date of Birth _____ Place _____

Height _____ Weight _____ Sex _____ Father's Name _____

Work Experience _____

Training Desired _____ 1st Choice _____ 2nd Choice _____

Hobbies _____

Extra-curricular Activities _____

Training Agencies	Type of Training	Training Supervisor	Date
1			
2			
3			

Work Hours	Related Hour	Wage Rate	Total Wage	Wage Increases
1				
2				
3				

Date of Entrance into C.O.E. Program _____

Date Leaving Program _____ Reason _____

Employment After Leaving School

Employer	Position	Date.	Wages

PROGRESS RATING BLANK

Student's Name _____ School _____ Employing Company _____

The immediate supervisor of the student-learner named above is requested to fill out this rating sheet. This report will be used by the coordinator in evaluating the progress of the student-learner. Place a check mark in the column which most closely indicates the student's rating on each item.

JOB ATTITUDE	Excel.	Good	Avg.	Poor
1. Getting along with people				
2. Reaction to criticism				
3. Cooperation				
4. Interest				
5. Initiative				
6. Loyalty				
GENERAL RATING ON ATTITUDE				

QUALITY OF WORK	Excel.	Good	Avg.	Poor
1. Accuracy				
2. Neatness				
3. Following instructions				
4. Planning				
GENERAL RATING ON QUALITY				

QUANTITY OF WORK	Excel.	Good	Avg.	Poor
1. Capacity				
2. Adaptability				
3. Use of time				
4. Physical alertness				
5. Mental alertness				
GENERAL RATING ON QUANTITY				

REMARKS: _____

_____ Date _____ Signature of Supervisor

A careful record is kept of both the training and the employment of each co-op student. At the left is a blank used for the general record of a student and at the right a progress rating record. The latter is filled out at the end of each semester.

may not be altogether satisfactory for some employers due to production schedules, rules, and employment regulations. However, in most cases, the employer can arrange part-time work for learners.

At the present time 150 students have been placed representing 38 different occupations, and 75 co-operating employers. Some of the occupations in which training is being received include commercial art, accounting, auto-shop mechanics, clerical work, drafting, dress designing, journalism, printing, photographic finishing, refrigeration, radio, and sales.

A complete permanent record of each student during his time as a participating student and following his graduation from high school will be kept. It is felt that these after-graduation follow-ups will benefit both the student and the progress of the co-operative occupational program.

Mr. Hollis Dahlor is the co-ordinator in charge of the program.

APPLICATION FOR CO-OPERATIVE OCCUPATIONAL TRAINING

Date..... School.....

Personal Information

Name..... Address.....
Phone.....Sex..... Birth Date.....Age....
Weight....Height....Parents or Guardian.....

School Information

High School Subjects Completed: (year of high school; subjects, grades.)
What high school subject do you like best?.....
What high school subject do you like least?.....
What extracurricular activities do you like?.....
Do you prefer activities in which a large number of people are engaged or would you prefer being alone?.....
Do you intend to go to college?.....Where?.....
Do you have a hobby?.....What?.....
Why are you interested in this program?.....
Do you understand the program thoroughly?.....
Have you discussed this program with your parents?.....
Do your parents satisfactorily understand the program?.....
Have you discussed with your parents your plans following high school graduation?.....

Work Experience

Have you worked at jobs for which you were paid?.....
Description of Work.....Employers.....
Are you financially able to remain in high school until graduation without working?.....

Clayton McGinnis, a high school senior in training for electrical work, receives on-the-job instruction while working on a battery charger under the direction of Eugene Clark, foreman for the Hammett Manufacturing Company of Kansas City, Missouri.

Family support required?.....
Are you interested in a job where you can make the most money or in training for a future job?.....
What type of occupation do you desire training in?.....
First choice.....Why?.....
Second choice.....Why?.....
Is there any particular company you would like to work for? .....
Name of company.....
Why are you interested in this particular company?.....

To Parents or Guardian

Do you satisfactorily understand the Co-operative Training Program that.....(Student's Name).....is making application for?
Do you desire additional information about the program?.....
What type of work do you think...(Applicant's Name)... is most interested in?.....
Parents' Approval:.....
Student's Signature:.....
Principal's Approval:.....

CO-OPERATIVE OCCUPATIONAL EDUCATION — TRAINING MEMORANDUM

School .....
Student-learner .....
Training agency.....
Type of training.....

It is understood that the training agency will provide, in so far as possible, work experiences which will contribue to the development of an efficient worker.

The student-learner will conform to a production training schedule as assigned by the employer for a minimum of 15 hours per week. Maximum time that student may spend on the job will be arranged by participating parties. Student-learners shall be subject to all rules and regulations which apply to the other employees.

The student-learner, while in school, will spend one hour each day in a related study course for the purpose of gaining knowledge related to work assignments.

The training may be discontinued at any time by either the employer or co-ordinator, but each agrees to notify the other in advance. It should be understood that credit will not be allowed for less than 300 clock hours' work on the training job plus related study requirements.

All adjustments in training should be made through the co-ordinator in charge of the program.

Student-learner: .....
Parent or Guardian:.....
Employer: .....
Co-ordinator: .....

RULES FOR TEACHERS

The Gloucester, Mass., school committee has adopted a series of rules for its teachers, prepared by Supt. Ernest L. Lake, and intended to express the school policies on the employment, service, and separation of members of the staff. In order to make clear its attitude the committee has adopted a preamble to the rules which reads in part as follows:

"The key to success or failure in public school education lies with the classroom teacher. The ability, personality, spirit, and enthusiasm of the classroom teacher count for more than all other factors combined. The excellent teacher will have a good school in spite of many discouraging factors. She may have inadequate or incompetent supervision, be working in unpleasant schoolroom surroundings with old textbooks and meager supplies, but her own efficiency, her love of children, and her joy in achievement will make a good school. On the other hand, the best of supervision, the finest of schoolroom surroundings and equipment, all that can be desired in books and supplies, will not make a good school for an incompetent, an indifferent or an unhappy teacher. The school committee desires to express this high regard for the work of the classroom teacher before laying down rules that might otherwise seem petty and arbitrary."

A new rule declares: "No teacher shall resign without giving in writing to the superintendent of schools at least four weeks' notice thereof, exclusive of vacations. Unless otherwise approved by the school committee, resignations will not be accepted to take effect between May 1 and the closing sessions in any school year, nor to take effect in the month of September, unless in the latter case the written resignation has been received by the superintendent of schools before July 15."

School Survey of a Western College City

W. W. Durham[1]

The city of Pullman, Wash., had its beginning in the filing of three homestead claims in the late seventies. The Washington State Agricultural College opened there in January, 1892. Whitman County, in which it is located, has an area of 2167 square miles, 97.5 per cent of which is in farms. The county population grew rapidly from 1871 to 1910; since then mechanization of farm operations has caused a rather steady decrease up to the present. On the other hand, Pullman has gained population in every decade excepting 1910–20.

The Pullman school district is a fully consolidated district in accord with the program of the Washington State Committee for the Reorganization of School Districts. It comprises three whole townships and parts of eight adjacent townships, amounting to 195 square miles, the equivalent of five and one half townships. The trade, banking, and service areas of the city are practically identical with the consolidated school district. In the entire situation there is an opportunity and a challenge to develop a splendid economic, social and cultural community unit.

The rural population apparently is stabilized; noticeable change would have little effect on the schools, as the dominant factor for years past and for the future is the Washington State College. Since 1920 the population graph of Pullman has been somewhat above and nearly parallel to the curve of the median enrollment of the College; both were well above 4000 in 1940. At the present time approximately one fourth of the public school pupils are from the rural areas, one fourth are the children of faculty or other employees of the College, and one half are from the families of the city.

For thirty years the average increase in the enrollment of the College has been about 110 students per year. Even if that average should hold for an extended time, the enrollment is likely to be greatly accelerated for the first years of peace. The factors supporting that expectation are the education of returning soldiers, the Grand Coulee irrigation development, and the continued increase in the population of the state. A college enrollment of 6000 and a corresponding city population within ten years are practical certainties. That both may reach 7000 or 8000 is to be considered. The new president, Dr. Wilson Compton, has set goals of high accomplishment for the College.

A Favored City

The city must give attention to the fact that on account of the benefits reaching it through the College, it is a favored place and owes it to the people of the state to maintain a city worthy of the institution. No present shortsightedness should block future progress.

An airview of Pullman, Washington, looking west from the air above the College campus. In the immediate foreground is College Hill and the campus; in the upper center is the business section; at the top left is Sunnyside Hill; top middle, Military Hill and the High School.

Perhaps no phase of American life is being more examined and considered for change than is public education. Some accord it a large part of the credit for the material progress enjoyed by our people. Education has a greater task, however, than promoting mechanical improvements; it realizes that the machine has almost run away with its creators. It is becoming more generally accepted that all persons, throughout life, should have the opportunity and be given every encouragement to develop themselves to their maximum so that they cannot only make a living but really live with the "making."

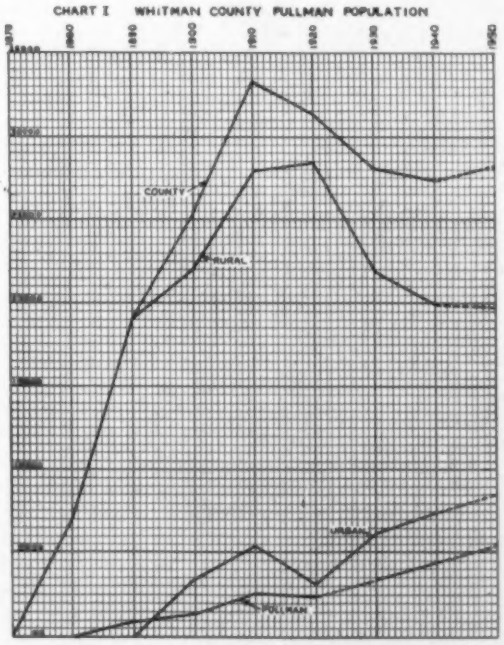


Chart I. Population growth and school enrollment from 1870 to 1940 with ten-year projection to 1950.

In the survey no proposals have been described as to a fixed policy of educational program or form of organization. Rather, an effort was made to show how the present and future school buildings could be made to serve an advancing curriculum. Neither superintendent, board, nor specialist can determine for any extended time, the educational program for a community. They can evaluate experiences and trends and point a path of probable development. To construct a school building tailored neatly to any one program is almost sure to lead to difficulties later on. The program is as certain to need letting out as are the garments of its pupils.

The present organization of the Pullman schools, 6-2-4, retains the benefits of a junior high school while preserving harmony with neighboring schools, all of which are organized on the 8-4 plan. A tuition kindergarten is operated in one school. Free kindergartens will probably be in all the schools as soon as rooms can be provided. The home-economics department of the College operates a tuition nursery school primarily to provide laboratory experience for the students of the de-

[1]School Plant Specialist, Tacoma, Wash.

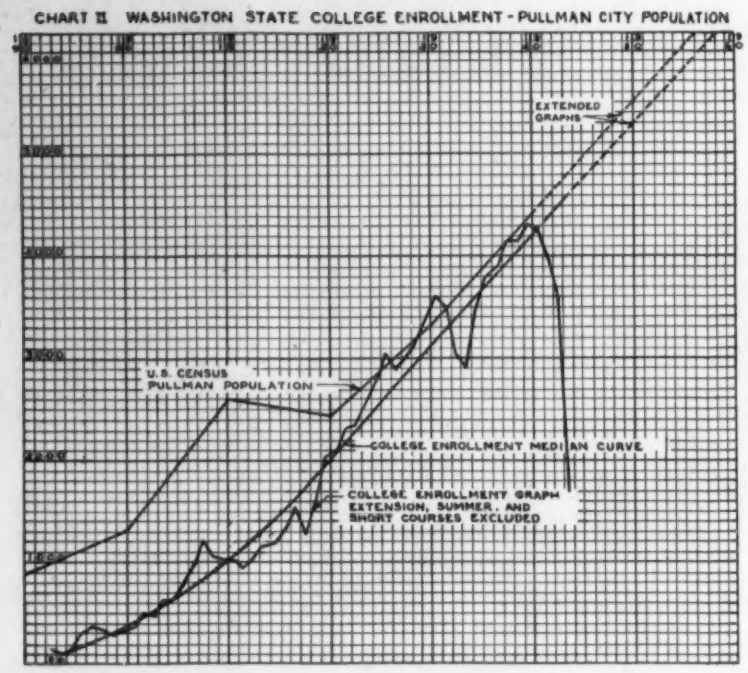


CHART II WASHINGTON STATE COLLEGE ENROLLMENT - PULLMAN CITY POPULATION
EXTENDED GRAPHS
U.S. CENSUS PULLMAN POPULATION
COLLEGE ENROLLMENT MEDIAN CURVE
COLLEGE ENROLLMENT GRAPH EXTENSION, SUMMER, AND SHORT COURSES EXCLUDED

Chart II. Enrollment of Washington State College and city population, Pullman, Washington. The college enrollment curve has again taken a strong upward trend following the end of the war.

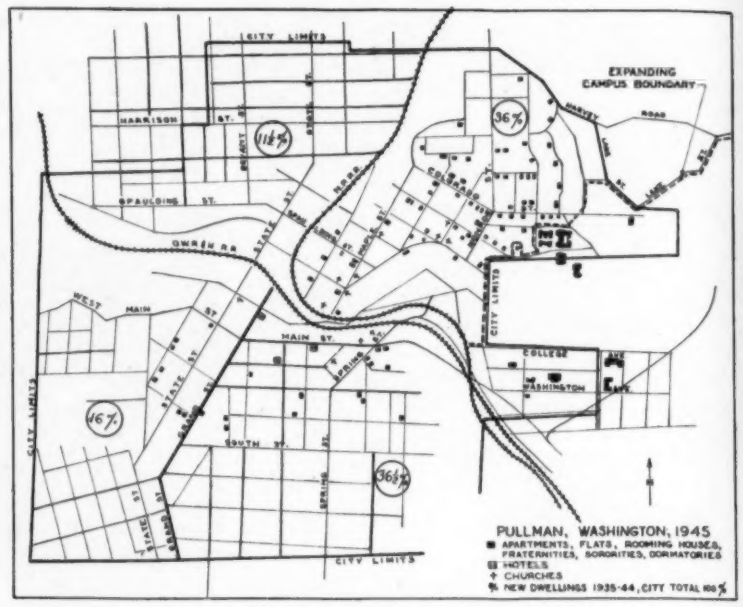


Chart III. Location of Multi-family buildings and new homes.

partment. A parallel in the high school cannot be considered until the need for such a school on the child's account is more generally accepted.

The presence of the College, with its short and extension courses, greatly reduces the need for added high school years and for adult classes. Needs for extended work may be met by courses developed co-operatively by the College and the high school. Such a program would better serve the high school graduates who enter college but who do not finish. Of Pullman high school graduates, 80 per cent enter college. Home-economics, agriculture, commercial, and music classes in the high school serve as observation and training posts for education students of the College, under a co-operative employment arrangement.

A City of Four Hills

The city is built on four hills rising rather sharply above the valleys which separate them. At the crossing of the valleys is a flat occupied by the business section. The hill crests are from 250 to 300 feet above the flat. One valley contains a creek and a highway; one a river and a railroad; one a creek, a highway, and a railroad; and the third, the river, a highway, and the two railroads.

Such physical conditions seem to indicate four elementary schools which could only result in all being rather small even when the city shall have doubled its population. The disadvantages of such small schools from the standpoints of curriculum, administration, and operation are quite obvious. The extra cost and lower utilization of auditoriums, gymnasiums, and lunchrooms, as well as extra cost of more principals and janitors, is also apparent.

If the survey does no more than show the practicability of two good elementary schools in place of four small ones, it has been fully justified. Its cost represents a very small percentage of the saving it indicates. The district is now operating 15 classrooms for grades 1 to 6. Adding kindergartens and doubling the city

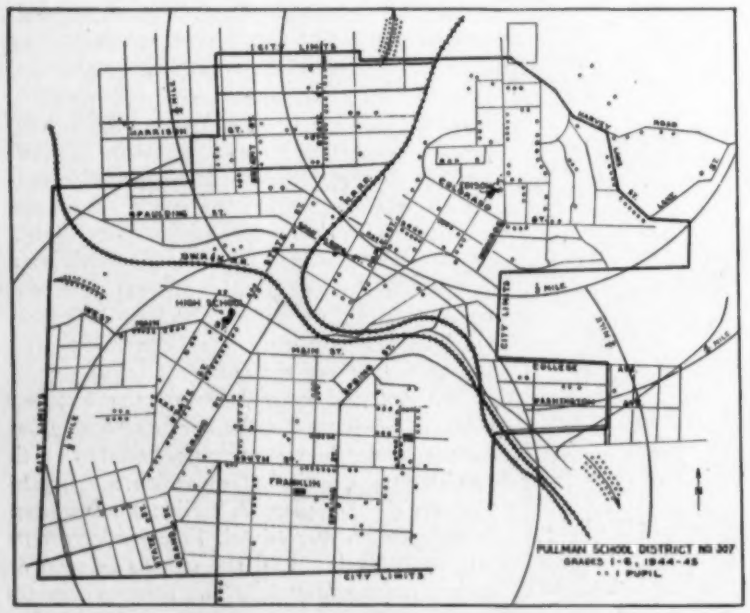


Chart IV. Spot map of the pupils enrolled in grades one to six.

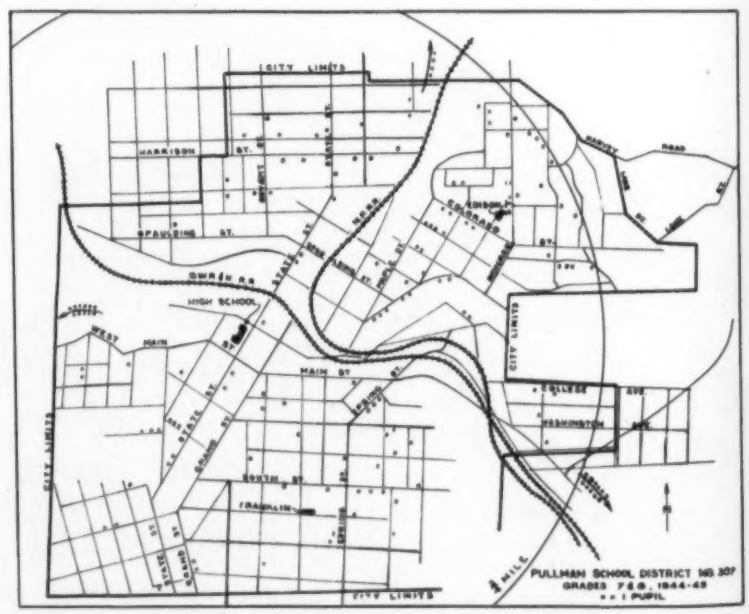


Chart V. Spot map of Junior High School pupils.

Pullman, Washington, looking east toward the College campus.

population will create need for not to exceed twice that number of classrooms. Mapping the location of homes built up to, and during the past ten years, indicated the areas in which development is taking place and pointed to a solution of the problem of locating two schools to serve all areas.

College Hill is very nearly built up to a desirable density. The inevitable expansion of the college campus and the increase of group housing of all kinds outside the campus will continue to crowd private residences off the hill. The Edison elementary school, once in the center of the population of this area, is now increasingly off center. The site is less than three quarters of an acre and is so closely surrounded by residences, fraternities, and sororities that more ground would cost from $40,000 to $50,000 per acre. Remoteness of available sites and steep street grades would make it very costly to move and salvage the buildings involved.

The density on College Hill has induced the development of a small flat to the north and a beginning of the development of a hill beyond. These two areas must absorb all the expansion to the north between the valley to the east and the college's experimental farm on the west. Across the valley to the east is Military Hill, a residence area which has had its share of the new homes in the past ten years but which would have to develop much faster than the rest of the city for several decades before it would have elementary pupils enough for a good-sized school. It became apparent as the surveys progressed that a new school on an ample site less than a half mile north of the present Edison school would best meet future needs. It would serve and be equally accessible to, Military Hill, College Hill, the flat, and the hill beyond. Without excessive density, these areas may double their populations and all pupils be within one mile walking distance of the school.

This raises the question of reasonable walking distance. The state contributes to the cost of transporting rural pupils who live two or more miles from school. Many of them walk considerable distances to reach the school bus. If it is reasonable for rural children to walk up to two miles, certainly it is not too much for urban children to walk up to one mile. The district cannot undertake to place a school within a very short distance of every home site that strikes someone's fancy. It is under obligation only to provide the best possible school, reasonably accessible to a high percentage of the children. Parents have an educational responsibility in locating their homes. From a health standpoint there is so much in favor of a good mile walk that it may well become a requirement rather than a thing to be avoided. Probably schools will be providing for much more vigorous physical exercise for all pupils than in the past. Unequal walking distances of pupils are somewhat evened up by requiring those living the shorter distances to walk home for lunch.

On top of the hill south and above the business area is the Franklin elementary school which is so well located that it will remain within one mile walking distance of all pupils on both Pioneer Hill and Sunnyside Hill to the east when their populations have more than doubled. The one and one half acre site can be increased to four acres at reasonable cost.

There are now first and second grade classes in the high school building on Sunnyside Hill. These can be cared for in the Franklin school when it is enlarged. All hazards of walking to the two elementary schools can be met by established highway crossings provided with push-button traffic lights, one railway automatic crossing signal, and one railway overpass for foot traffic only.

The junior and senior high schools are housed in a connected group consisting of an old high school building constructed at the turn of the century, a gymnasium and classroom unit built in 1929, and a classroom unit built in 1938. All things considered, the site is as well located as it could be on the city's rugged topography. It is only two blocks from the crossing of the main highways which is the business center; but that distance isolates it sufficiently from the traffic and other disturbances. The area is three and one half acres, but the usable play space

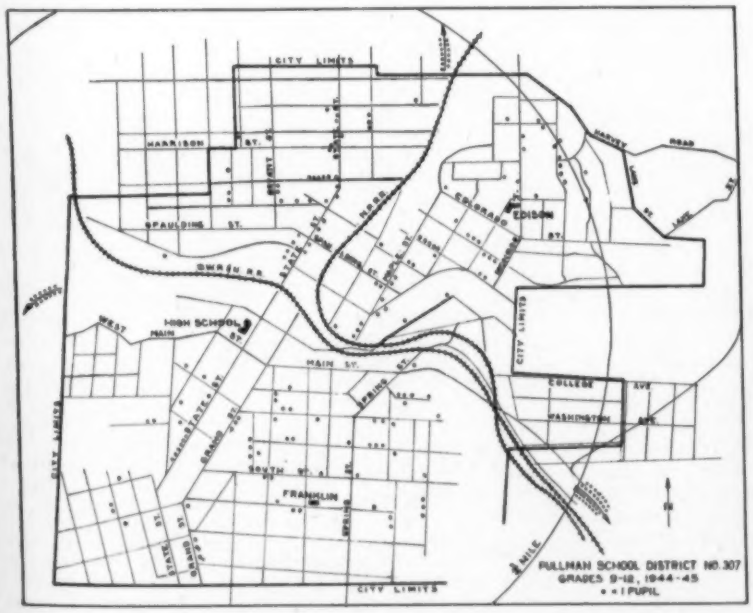


Chart VI. Spot map of Senior High School pupils.

Pullman High School, Pullman, Washington.

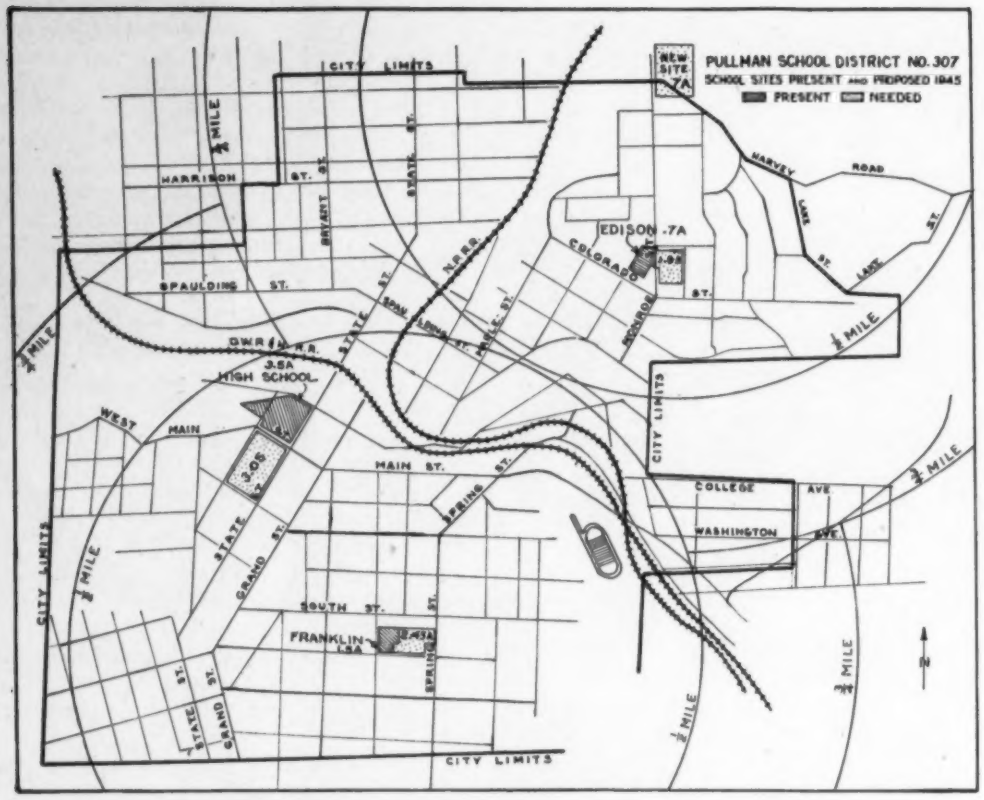


Chart VII. Location of high school and elementary schools, with needed site expansion.

is a triangular shape amounting to only one acre. The greater part of the site is occupied by a terrace taking up a drop of 14 feet from the ground floor to the street in front. Physical education classes have to be taken nearly a mile in a school bus to a city athletic field. Too large a share of the available time is lost in the trip. The survey report recommends that an entire block adjacent to the high school grounds be acquired at once, in spite of the cost of moving some homes recently built, demolishing other buildings, and the necessity for considerable grading on the hilly surface.

The old building is entirely unsuited for remodeling. The other units suggest a comment on master plans: The plan of Architect No. 1 consisted of the gymnasium unit, which he built at one end with an auditorium at the other end and a classroom unit in between, all extending back over the very limited level ground. Architect No. 2 built the front half of the classroom unit somewhat as proposed, but his master plan located the future auditorium back of these classrooms and placed another classroom unit at the end. Again, both future units were to extend over the much needed level ground. The master plan proposed in the survey report places the auditorium at the end, as did the first plan, but projects it forward over the terrace area, not only to save the level ground but to make the auditorium accessible to the public without having to pass through other parts of the school building. It is important that master plans and the units built in accordance with them be not restrictive but suggestive, and leave the way open for the thinking and development of others later on.

As the total enrollment of grades seven and upward is unlikely to exceed 1000, as far as one can see into the future, the report recommends that these grades be permanently housed in one building. That will permit any form of organization of grades 7 to 12, 13 or 14. For both junior and senior high schools it will make possible better facilities and their much higher utilization. As the College will have an auditorium large enough to meet the greatest demands of the community, the report recommends a high school auditorium large enough for the student body only. On the other hand it proposes a physical education plant including a swimming pool large enough for community participants with space for spectators.

The report has presented other considerations which a school building program entails, too numerous to relate here. It has set forth site locations that will meet all needs for many decades. It has pointed out a program of building development; but it has carefully avoided any effort to freeze the patterns of either educational programs or buildings. These patterns are developing rapidly, and it is expected that the educators and architects serving the district in the future will have ideas for the enrichment of the schools which should not be made more difficult by action taken at the present time.

The report is to have extended consideration by the school board, faculty, a citizens' committee, and the voters. This gives promise that action taken will not be the result of too easy acceptance of the recommendations given in the report.

Indiana Schoolmen Study Postwar School Building

Three hundred school administrators, school board members, architects and others interested in school building problems gathered at Indiana University, February 5 and 6, for a two-day postwar building conference, sponsored by the University's School of Education. The meeting was under the direction of Dr. Harold E. Moore.

Dr. Moore pointed out that a million more six-year-olds will enter school during 1949–50 than entered annually in the early forties and that this fact calls for examination of building situations to determine future building, staff and financial needs.

Principal speakers for the conference were Francis R. Scherer, architect of school buildings for the Rochester (N. Y.) board of education and Dr. Don L. Essex, director of the division of school buildings for the New York State Department of Education.

Dr. Essex explained that the tax dollar yields more if the school building has both school and community use. "Moreover, rich dividends in community interest in and support for the school are gained," Dr. Essex said. "There is a growing sentiment among rural school people that the central rural school plant should be planned to provide both for the educational needs, and the social, civic, recreational and cultural needs of the community." Only about one per cent extra cost is required to plan a building for community as well as for school use.

Discussing this same subject, Mr. Scherer stated that a closer relationship exists today between the community and the school than a decade ago. "When a proposed school is in the 'talking' stage, with only line sketches being made preparatory to agreement upon a preliminary plan, interested representative groups and individuals in the community might well be consulted as to their views, chiefly concerning the facilities to be offered that are over and above those basically required for the educational program."

In discussing the planning of schools in view of initial and recurring costs, Mr. Scherer predicted a huge school building program. "It appears that building costs of today will continue substantially as is, perhaps with slight upward trend. There is a relationship between initial cost and the timing with which a project is launched. Unless the needs for the new schools are acute, something is to be gained by timing the award of contracts so as to supply work at a time when local or national employment conditions need bettering."

Mr. Scherer showed further that altogether too many schools have been constructed since World War I in which the planning reflects inadequate or insufficient collaboration between the educator, architect, and engineer. "Progress comes from research and experiment and this holds true in education in substantially the same manner as in industry," he said. "The objective is betterment of the end product. Changes resulting from industrial research frequently necessitate remodeling and re-tooling. By the same token changes in the educative processes

(Concluded on page 86)

Classroom Ventilation Requirements

Albert J. Nesbitt

(*Concluded from March*)

What Cold Air Does

I should like now to refer to a picture and a graph both of which clearly indicate the effect of introducing air into an occupied space at too low a temperature. The graph also shows the effect that a wide variation in air stream temperature has upon the temperature in the occupied area of the room. (See Figs. 4 and 5.)

During the Mastbaum studies, when the temperature of the entering air was limited to a minimum of 60° by an air stream controlstat in the air stream, the maximum variation in the temperature of the occupied area as measured 6 in. above the floor, 31 in. above the floor, and 66 in. above the floor, was less than one degree (see Fig. 7). This condition can be and is duplicated in most cases where minimum air stream temperature is not permitted to fluctuate widely. It should be noted (see Fig. 5) that even though the minimum air stream temperature at times did not drop below 60°, wide variations in the temperature of the occupied area of the room will occur if the air stream temperature is permitted to vary over a wide range. The more nearly the air stream temperature can be maintained to the room temperature, the more uniform will be the temperature throughout the room. Inversely, the wider the air stream temperature is permitted to fluctuate the wider the variations will be in temperature throughout the room.

The wholly satisfactory ventilation system requires more than that the room thermostat be held at an acceptable temperature level. It is equally important in so far as the comfort of the room occupants is concerned, that the floor line temperature be held close to the breathing line temperature and limited to a maximum difference of 2° as recorded within 6 in. of the floor line.

In the light of our present-day knowledge, ventilation standards for school buildings are now widely accepted upon the basis that the system employed should be capable of circulating 30 cubic feet of air per minute per pupil. Of this total quantity only 10 to 15 cubic feet need be taken from outdoors to maintain an acceptable odor intensity level, the remaining quantity being taken from the room unless and until more than 10 or 15 cubic feet of outdoor air is required for heat removal. Then the system should be capable of automatically increasing the percentage of outdoor air and decreasing the percentage of recirculated air up to the point where the full 30 cubic feet of outdoor air per minute per pupil is being supplied to the room if needed to prevent overheating.

Later, I wish to touch upon the operating economies that result from reducing the outdoor air supply, but at the moment I should like to direct your attention to the effect of partial recirculation of room air upon the comfort of the occupants. It is known that the average 15-year-old sedentary child gives off moisture at the rate of 600 grains per hour and this goes toward increasing the moisture content of the air within the room. The Jules Mastbaum study shows the practical effect of this to be as follows:

With an outside temperature of 21° F., with a relative humidity outdoors of 50 per cent, the relative humidity within the room was 30 per cent when mixed with 15 C.F.M. of outdoor air and 15 C.F.M. of room air. This compared to a 16 per cent relative humidity under the same indoor and outdoor conditions when introducing the full 30 C.F.M. of air from outdoors. This 14 per cent improvement in the relative humidity made a substantial contribution to the comfort of the room occupants. The mixture of indoor and outdoor air materially helps to overcome what is sometimes referred to as the cold 70° temperature which is the result of the room air being too dry.

While the human system finds it difficult to adjust itself to wide variations in dry bulb temperature, it does have the capacity to adjust itself to wide variations in wet bulb temperature, and the reduction in outdoor air quantity not only produces economies, but actually as a result of improving the moisture content in the air through recirculation of room air provides an acceptable condition of relative humidity.

Systems Which Meet Requirements

These then are the ventilation requirements as widely acknowledged and accepted today. There are several systems used in meeting these requirements, the most widely being the unit ventilator system.

It is clear from the studies referred to that if one is to get the maximum benefit of the present-day concept of ventilation and to obtain these benefits without sacrificing any of the desirable conditions of room comfort, the ventilation system must be geared to the individual requirements of each room. It is apparent from our study of room conditions as shown in our Jules Mastbaum room chart (Fig. 1) that even within a given room the demands upon the ventilation system vary widely. Think then how much more widely these demands vary from room to room in the same building. In one or more rooms 10 C.F.M. of outside air may be adequate, while in other rooms within the same building and at the same time, 30 C.F.M. of outside air may be required.

In the unit ventilator shown in the accompanying picture (Fig. 6) before occupancy during the early morning heatup, the damper is closed to outdoor air. Room air is circulated, and the maximum fuel economy is obtained during the period that the unit is being prepared for occupancy.

In the unit ventilator designed for a 40-pupil room, the equivalent of over 300 square feet of direct steam radiation is available for heating during the warming up period. Thus it will be seen that there is a tremendous potential heating up capacity available within the unit. The result is a short heating up period with its attendant economies.

At 67° the damper automatically is opened to admit the desired minimum quantity of outdoor air. This minimum may be varied within the unit readily by a simple adjustment. During room occu-

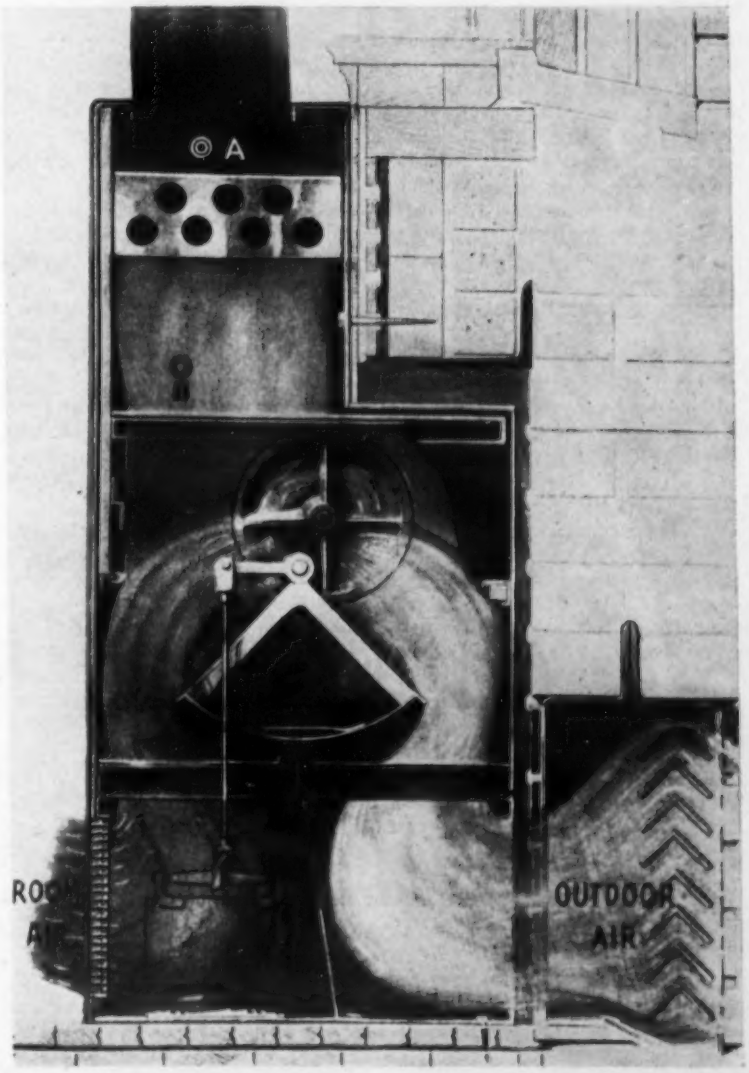


Fig. 6. Unit Ventilator.

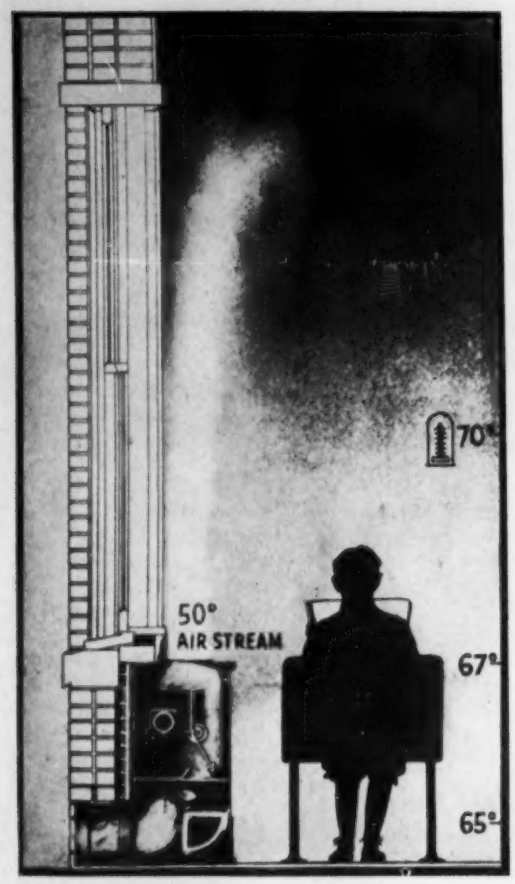


Fig. 4

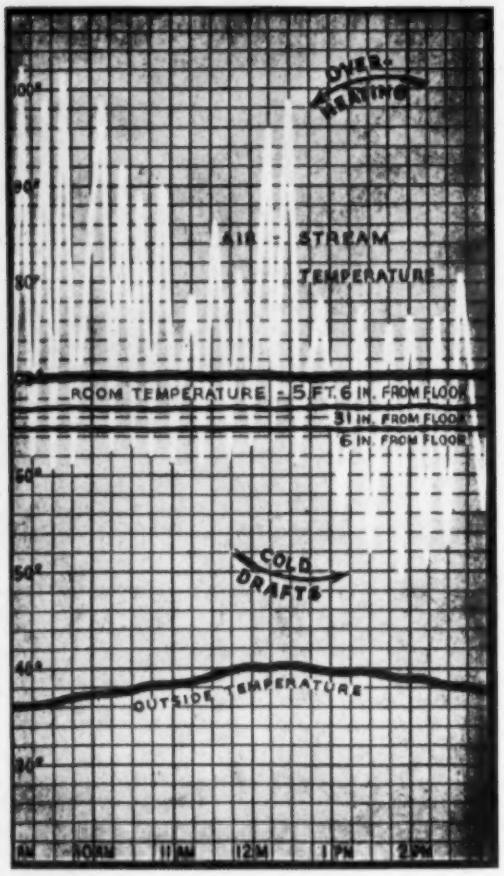


Fig. 5

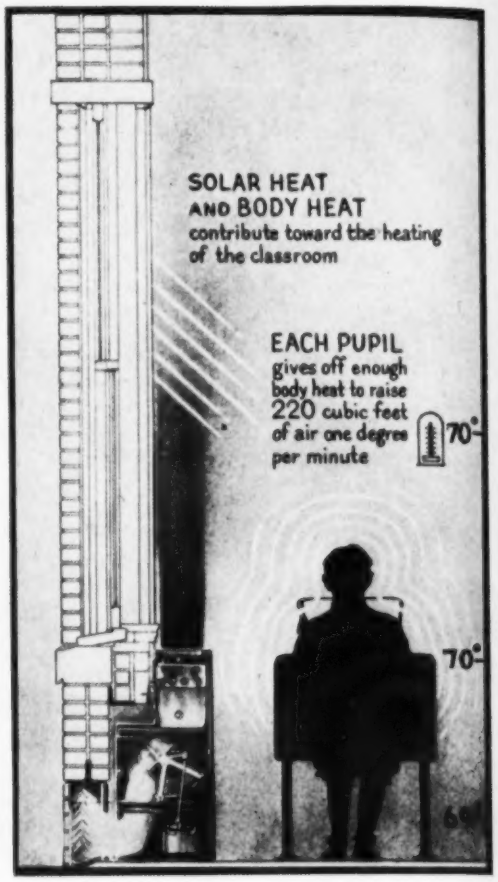

SOLAR HEAT
AND BODY HEAT
contribute toward the heating of the classroom
EACH PUPIL
gives off enough body heat to raise 220 cubic feet of air one degree per minute
70°
70°

Fig. 7

pancy, the indoor and the outdoor streams of air are mixed within the unit by the fans, heated if necessary by the radiator, and discharged in a vertical, high velocity stream.

In a unit ventilator employing the principle of a fixed minimum quantity of outdoor air, an air stream control thermostat is located in the leaving air stream above the radiator. This air stream control either by regulating the proportion of indoor and outdoor air, or by admitting a small quantity of steam to the radiator when necessary in maintaining a fixed minimum outdoor air quantity, never permits the air to enter the room at a temperature lower than 60°. The room thermostat, by modulating the unit steam supply, regulates the air stream temperature above 60°, to maintain 70° throughout the room.

For the greater part of many clear sunny days with the room fully occupied, no steam is required in the unit ventilator radiator, because the air stream mixture of room air and outdoor air, together with the heat from the sun and the pupils' bodies will keep the room at 70°. To prevent overheating, the damper of the unit ventilator automatically under the control of the room thermostat will take an increasing amount of air from outdoors until all air is taken from outdoors, if necessary. It should be noted, that at any time when more than the minimum amount of outdoor air is being introduced, steam is off the radiator.

If in place of locating the air stream control thermostat above the radiator, it is located above the fans in the position marked "B," then a variable quantity of outdoor air is provided with no fixed minimum, and in this cycle commonly known as the Type "O" Cycle, indoor and outdoor air is mixed within the unit, after the room is up to temperature, to maintain a 60° mixture at the discharge of the fan. The radiator of the unit ventilator is used only to warm the air to whatever temperature may be required above 60°.

Proportions of Outdoor Air

The proportions of outdoor air and room air supplied in the Type "O" Cycle for room temperature of 70° and a 60° mixture at the fan is, 100 per cent outdoor air for an outside air temperature of 60°, 50 per cent outdoor air and 50 per cent room air for an outside temperature of 50°, and 1/3 outdoor air at 40°.

As the outside temperature drops, the quantity of outdoor air is reduced. In the use of the Type "O" Cycle of control there is, of course, practically no ventilating load since the maximum ventilating load is only that required to heat the air from 60° to 70°. The balance of heating of outdoor air is done entirely by mixing with room air.

The use of an air stream control thermostat within the unit ventilator eliminates the lag characteristics of control which depends upon the room thermostat only. Experience over a long period of years has shown that comfort conditions within the occupied area of the schoolroom are of a higher order where air stream control is used. This may readily be verified by checking the temperature and air movement within the occupied space. With the air stream control thermostat properly adjusted, variations in temperature between floor line and breathing line are seldom more than 1½° (see Fig. 7).

The most widely used of the two cycles I have just described is that in which a fixed minimum quantity of outdoor air is supplied to occupied rooms at all times, and that minimum is quite generally set at a volume of 10 cubic feet of air per minute, per pupil.

While fuel economies are, of course, to be expected from any system in which the outdoor air introduced into the room is warmed in part or in whole by mixing with room air, the following coal consumption records clearly indicate the magnitude of the economies produced by a unit system employing a thermal system of ventilation control such as I have described. The first report I will refer to was prepared by school authorities in Gary, Ind. It shows their actual coal consumption records in 8 school buildings with different systems and with different outdoor air quantities (see Fig. 8).

The 8 Gary buildings shown in the chart all burn Indiana coal, 1½ in. screenings. All are equipped with stoker fired boilers. In order that proper weight might be assigned to the age of the heating and ventilating plant, I have incorporated into the Gary report — beside the name of each building — the date the building was constructed.

In all unit ventilator equipped buildings, the unit ventilators, with the exception of certain corner and oversize rooms, carry both the heating and the ventilating load. There is no supplementary direct radiation in the classrooms except as noted. The systems in all buildings, regardless of the type of system employed, are all under automatic temperature control.

Some Economies

Comparing the 1940 installation of unit ventilators in which the outdoor air quantity was 1/3 of the total air in circulation — in

COAL CONSUMPTION FOR YEAR 1943–44 FOR SEVERAL GARY, IND., PUBLIC SCHOOLS

School name	*Year built*	*Type of H & V system*	*% Outdoor air*	*Contents M. Cu. Ft.*	*Coal consumption (tons)*	*Total degree days for year*	*Lb. Coal consumed / ° day per M. Cu. Ft.*
Emerson H. S.	1908	Central Fan	100	2266	1249	5714	.193
Froebel H. S.	1912	Central Fan	100	2286	1044	5714	.160
Jefferson G. S.	1906	Central Fan	100	572	215	5714	.132
Roosevelt H. S.	1928	Unit Ventilators (By-Pass)	100	2210	722	5714	.114
H. Mann H. S.	1926	Unit Ventilators (By-Pass)	100	2712	926	5714	.119
Wallace H. S.	1932	Unit Ventilators Radiator Controlled	100	2392	705	5714	.103
Edison H. S.	1935	Unit Ventilators Radiator Controlled	Part 33	611	118.2	5714	.068
Wm. A. Wirt H. S.	1940	Unit Ventilators Radiator Controlled	Part 50 $33\frac{1}{3}$	625	103.6	5714	.058

Note: All schools burned the same Indiana coal of 12,000 B.T.U./lb. heating value.

Fig. 8

this case 10 cubic feet of outdoor air — total air in circulation 30 cubic feet per person, with the 1908 central fan system supplying 30 cubic feet of outdoor air per minute, per pupil, the comparison here being between the William A. Wirt and the Emerson School, we find the pounds of coal consumed per degree per day 1000 cubic feet to be .193 for Emerson, .058 for Wirt. Therefore, the coal consumption at the Wirt School is just about 1/3 of Emerson.

This may or may not be a fair comparison, for one should not lose track of the fact that the Emerson building was built in 1908, and while Gary enjoys a fine reputation for keeping its mechanical equipment in good order, we are not in possession of information that tells us just how the relative efficiency of the two boiler plants compare.

In the figures given for the Roosevelt, Mann, and Wallace Schools, the former two buildings being equipped with by-pass type unit ventilators handling 100 per cent outdoor air, while the latter building is equipped with unit ventilators of the radiator control type also handling 100 per cent outdoor air, the radiator control type unit shows a 10 per cent saving over the by-pass type unit. Here again we must give consideration to the fact that factors other than the unit ventilators influence operating efficiencies.

If we can assume, and I think it is reasonable, that the larger plants in the Roosevelt, Mann, and Wallace Schools are being operated as efficiently as the plant in the smaller Wirt School — and here I am referring to the boiler and general plant efficiency — then I think it is safe to conclude that fuel savings resulting from mixing indoor and outdoor air in a unit ventilator system in the manner described can result in a reduction of from 40 to 50 per cent of the fuel costs over a comparable system taking 30 cubic feet of air from outdoors.

Our next chart (Fig. 9) shows coal consumption in two school buildings in the city of Philadelphia. The source of information is the office of the chief mechanical engineer of the board of education, School District of Philadelphia. Unit ventilators are used in the classrooms of both schools; the Dobbins School having 219 classroom unit ventilators and the Mifflin School 41 classroom unit ventilators. Both jobs are equipped with automatic temperature control throughout. There is no direct radiation in any of the classrooms except the corner rooms and the oversized rooms, the unit ventilators carrying both the heating and ventilating load with the exceptions noted.

Fuel used at the Dobbins Vocational School is No. 4 buckwheat. Fuel used at the Mifflin School is No. 2 buckwheat. In both schools, the auditorium and gymnasium are heated and ventilated with a central fan system, units being used only in the classrooms and shops.

All unit ventilators handle 30 cubic feet of air per minute, per pupil, of which quantity a minimum of 15 cubic feet of air is taken from outdoors.

Economies Possible in Old Buildings

It is interesting to note that the opportunities to effect very substantial operating economies and to improve the comfort conditions within the room are present in many school buildings equipped with unit ventilators in which the installations were made prior to 1932. For the most part, installations made prior to that date were not adjusted to mix indoor and outdoor air. They may, in many cases, be converted to produce the same results as those reported herein.

I cannot overstate the importance of automatic temperature control as a contributing factor to good unit ventilator performance. Not only must the unit ventilator be equipped with a good system of automatic temperature control, but that system must also be properly maintained and kept in good working order if the best results are to be obtained.

The average unit ventilator for a 40-pupil room has a capacity of 1200 cubic feet of air per minute and the motor operating fans in such a unit require about 125 watts per hour. Thus it will be seen, that the current consumption in a unit ventilator installation is extremely low, in fact, very much lower than with any comparable method of mechanical ventilation.

It must be emphasized that while effecting these operating economies, comfort conditions of the rooms have been greatly improved. The high character of results obtained from unit ventilators in general throughout the United States is perhaps best emphasized by a survey made by one of the leading school magazines and reported in its January, 1945, issue. This survey showed that 69 per cent of all school superintendents polled favored the use of the unit ventilator system; 21 per cent preferred the central fan system; and 10 per cent preferred no mechanical ventilation at all.

In conclusion, the ever increasing demand on the school as a community center requires a school plant which must be flexible for the varied and intermittent use of all rooms. The community center not only demands continuous plant operation in many quarters, but efficient and economical use of installed facilities. The advantages of the unit ventilator system in a changing program of this kind are at once apparent, since it provides the school plant with equipment that can be readily operated unit by unit to meet the varied and intermittent use of the room or rooms.

The modern school design requires flexibility due to changes in educational needs, and here again the unit ventilator, by its nature, is ideally suited to changes in quantities of air to be taken from outdoors and in the adjustment of total quantities handled within the capacity of the unit ventilator.

Our best assurance that time will not outmode the unit ventilator in this ever changing world in which we live is its adaptability to changing requirements.

COAL CONSUMPTION IN TWO PHILADELPHIA SCHOOLS

School name	*Mifflin (Breck)*	*Dobbins*
Location	Conrad & Midvale	22nd & Lehigh
Activity	Elementary	Vocational
Cubic content, heated	688,000	3,797,000
Floor area	48,842	303,775
Type boilers	Mills C.I. Sectional	Titusville, Cross Drum
Grates	Hand, Dump	Stokers, Chain Grate
Size coal	No. 2	No. 4
Total boiler H.P.	209	789
Boiler pressure	10 lb.	100 lb.

Year	*Total degrees days*	*Total tons*	*Lb. per D.D. per 1000 Cu. Ft.*	*Total tons*	*Lb. per D.D. per 1000 Cu. Ft.*
1942	4677	173.3	.108	860	.097
1943	4987	195.7	.115	912.5	.096
1944	4817	142.9	.086	1064.9	.116

Fig. 9

Sanitary Supplies for Schools

Paul W. Seagers

(Concluded from March)

6. Varnish and Inkspot Removers

Linn[2] recommends the following varnish removers: For ordinary paint and varnish, use one pound of trisodium phosphate to one gallon of hot water. For heavy floor varnish, use one half pound of paraffin in a gallon of benzol, plus one gallon of wood alcohol. This should be placed on the floor and sprinkled with a scouring powder and scrubbed with warm water. For furniture, add one gallon of acetone to one gallon of benzol and ¾ pound of paraffin wax.

For ink spots, use one pound of oxalic acid crystals to a gallon of warm water. Be sure to rinse well with warm water. This solution also can be used for bleaching and for removing rust spots on plumbing fixtures.

7. Concrete Floor Hardeners

Linn[3] suggests several concrete floor hardeners as follows:

No. 1. Magnesium silico fluroride, 2½ lb. in one gallon of water. Dilute and mop on floor in three applications 24 hours apart. The first application, two parts of water to one of solution; the second application, one part of water to one part of solution; the third application, one half part of water to one part of solution.

No. 2. Treat three or four times about 24 hours apart with 30 to 40 per cent solution of sodium silicate diluted four gallons of water to one of solution. Remove all excess by scrubbing with clear water after 24 hours.

No. 3. Mix the following chemicals in wooden or crockware container: 2 c.c. commercial sulphuric acid to one gallon of water, and add 2½ lb. of aluminum sulphate. Stir well, dilute two parts of water to one part solution, and apply to clean dry floor. At intervals of 24 hours more coats can be added, increasing the percentage of solution to water for the second application to one part of solution to one part water, and for the third application, two parts of solution to one part water. After drying well, be sure to remove the excess powder by scrubbing.

8. Floor Finishes and Waxes

A good treatment for wood floors is a penetration type of finish made by mixing 2/3 gallon boiled linseed oil with 1/3 gallon of turpentine and ¼ pint of Japan drier. There are many good penetration seals and bakalite varnishes on the market. In most cases, however, floors finished with the penetration type of materials are the easier to maintain.

Spirit waxes are not recommended to any great extent for schools, due to the fire hazard of the solvents and to the fact that they can ruin asphalt and rubber tile floors.

Water emulsion type waxes are usually a combination of some type of soap with carnauba wax. The emulsifying agents may be triethanolamine, ammonium linoleate, morpholine, and a newer one known as two-amino, two-methyl, one-propanol, or A-M-P. The first of these emulsifiers is usually considered the best. In the United States, carnauba wax is graded as follows: No. 1 yellow, No. 2 yellow, No. 2 North Country, pure refined North Country, No. 3 North Country, and No. 3 chalky. The number one yellow is usually considered the best. In the poorer grades of "water waxes" substitutions of candelilla, montan, ozokerite, and paraffin wax are sometimes made. These are usually poor substitutes. A good average formula for "water wax" is as follows:

Carnauba wax, No. 1 yellow	39.6 lb.
Triethanolamine	6.6 lb.
Oleic acid	4.5 lb.
Borax	1.2 lb.
Shellac	3.0 lb.
Ammonia	.43 lb.
Water	340.00 lb.

Of course, there are many variations of this basic formula. "Water waxes" are applied easily with an applicator and need little or no buffing. Schwarcz suggests, "that the wax film should be hard enough to resist footwear, but should not be so hard that it lacks 'self-healing' qualities on buffing. On the other hand, if it is too soft it will wear off too readily . . . . A simple method of examining a film to observe its possible wearing qualities is to scrape some off with a knife blade. If it comes off in the form of a fine powder, the possibilities are that the film is too brittle and nonyielding. On the other hand, if the film comes off in the form of a minute waxy ribbon that readily adheres to the knife, it is evidently too tacky for best results. A good rubless wax should have a low interfacial tension so it will spread evenly."

9. Hand Soaps

Experience has proved the liquid type soap the best for schools. Liquid soaps are made with caustic potash, while solid soaps are made with caustic soda. One of the best grade coconut oils comes from Cochin, Indo-China, while poorer quality oils come from Ceylon and Manila. Sometimes peanut oil, castor oil, or olive oil is substituted for coconut oil. The use of these substitutes results in an inferior grade of soap. It is good policy to purchase a 40 per cent soap and to dilute it for the required use. A gallon of U. S. Government Specification 15 per cent liquid soap gives about 4000 washings in elementary schools, 5500 washings in high schools, and up to 7500 washings for adults. Most soap dispensers will take an 18 or 20 per cent soap. The following concentrations are recommended: 20-25 per cent for shops; 20 per cent for shower baths; 15 per cent for toilet rooms; and 1 to 2 per cent for shampoo purposes.

10. Paper Towels

Junior size (10 or 11 by 13 in.), ground-wood-pulp sulphite or kraft towels are the most common; the latter are the more expensive. Many schools like to use the roll towels, while others prefer the single fold cabinet type. It is very important that the towels fit the standard size fixtures, have a soft texture, are strong, and that they absorb a reasonable quantity of water rapidly.

Fairly good tests for sample towels can be made in any school system. Number all samples first, then crush them and place them in a jar of water. Time the period of absorption and weigh before and after the test to determine the amount of water absorbed. Lay other towels flat and pour measured amounts of water on the samples until they have absorbed up to their capacity. A tension test can be used to determine the strength of the towels before and after completely saturated. Another test is to number the samples and ask 8 or 10 persons to use them and rate them in order of preference. When all of these scores are considered along with the prices of the towels a more intelligent choice can be made.

11. Insect Controls

The moths that do the most damage are the webbing clothes moth, the casemaking clothes moth, and the tapestry moth. The larval stage is the period in which the clothes damage occurs. A 0.5 per cent solution spray of sodium silicofluoride is used for mothproofing garments. Another preparation is a patented cinchona alkaloid solution. There are over 1000 patent formulas for mothproofing. A good spray is made by dissolving three pounds of paradichlorobenzene in one gallon of carbon tetrachloride. So-called mothproof paper bags are no better than any tight paper bag. Paradichlorobenzene and naphthaline are effective if used in a confined space in a concentration of one pound for each 100 cubic feet (see Farmers Bulletin 1655). Hanging garments in the hot sun for several hours or immersing them for ten seconds in water at 140° F. will kill moths. The use of cedar chips is not too satisfactory.

The two most effective roach powders are straight pyrethrum powder, and a powder made with equal parts of sodium fluoride and flour or talc. Be sure to dust in cracks and crevices. These powders kill in 24 to 48 hours, while borax is slower and limited in effectiveness. Farmers Bulletin 685 should be in every school.

Pyrethrum powder of a fineness to pass through a 200 mesh sieve is a general use insecticide. It may be used as a powder or a spray when combined with a light mineral oil solvent or a hydrocarbon distillate free from the kerosene odor. Rotenone combined with a solvent, such as ethylene dichloride, can be used in sprays. However, rotenone is slightly toxic to human beings and sometimes causes irritation to the eyes, nose, throat, and skin.

There are many synthetic insecticides. Of these, the most important is probably dichloro-diphenyl-trichloroethane, commonly known as DDT. It is a white crystalline solid, toxic, but no more dangerous than other household insecticides when directions are followed. It is mixed with some powder or liquid as a vehicle and retains its lethal power on surfaces for a long time after application. The commercial powdered DDT is usually 10 per cent DDT mixed with 90 per cent inert ingredients, such as talc, powdered soapstone, or

(Concluded on page 80)

The New York Conference of A.A.S.A.

The convention program of the New York A.A.S.A. Conference gave Secretary Shankland a continuous headache; the list of speakers and addresses, March 5 to 7, was one of substitutes. No less than 15 of the 34 men booked for the main sessions begged off at the last moment and so the members failed to hear such men as General Eisenhower and President Conant. Even President Lake was kept at home by a budget problem. New York is the center of so many great educational institutions and has such a reservoir of outstanding authorities in education that the lack of the original program speakers was not felt and a well-balanced list of significant topics was discussed by able men. At times there was a wide digression from the convention theme "The Unfinished Task" but on the whole the meeting represented some of the best thinking on the problems of postwar reconstruction through education and the solution of such troublesome problems as the rehabilitation of teaching staffs, teacher training, salaries, school plant construction, veteran education, adult education, and financing education at the new high cost levels.

World Citizenship

In accepting an honorary academic degree some months ago General Eisenhower asked "Why does not the educational profession put my occupation out of business?" Using this significant question as his text Dr. Wm. G. Carr in the opening address of the convention pointed out the need of redirecting American education to include the development of knowledges and attitudes which will give all American children the capacity for world citizenship and ability to carry on effectively for world peace. In the past the schools the world over have educated more for war than for peace; the German system of education under Hitler is the grimmest example of this fact. In Dr. Carr's opinion, the domestic phase of education for world citizenship must be (1) forward looking in preparing the coming generation for constantly closer co-operation of the nations and a better world society; (2) it must be realistic in looking factually at the cost of war and the rights and true conditions of other nations; (3) it must be comprehensive in considering the interests of all the peoples, not merely of the white races or friendly disposed nations; (4) it must seek to make young people develop a sense of responsibility for world peace. The development of a true world citizenship will give education another chance to outstrip chaos in the race for world control. Dr. Carr urged American co-operation with UNO and pointed out that UNESCO can be made a potent tool for making UNO a success if we use this tool of UNESCO as the means of educating all nations to have a genuine desire to keep the peace.

Mrs. Vera Michelet Dean, director of research for the Foreign Policy Association in speaking on the subject "World Chaos" seemed to feel that the way out of the present international distrust and conflict of interests is for the United States to co-operate with the allied European powers, particularly in such matters as the expansion of Russian influence in Asia, financial aid to England and to other countries. She urged the value of such projects as a military alliance with the British, opening up doors to imigration, reducing tariffs in order to stimulate international trade, and making up our mind what we shall do with Germany.

School Construction

The conference on school plant problems developed perhaps the most significantly helpful and definite series of facts of the entire convention. Dr. N. L. Engelhardt opened the meeting with a plea for planning new school plants to serve the widest community uses by adults as well as a broadened instructional program for children.

John E. Nichols pointed out the fact that postwar school building construction will not involve significant changes in materials or construction forms, but will continue with refinements in the types of construction and the use of cement, steel, brick, and lumber, and the newer materials for floors and roofs. There will be some use of radiant heat in one-story buildings, aluminum windows, and plastic flooring. It is an understatement to say that prices for school construction at present are exceedingly "confused and fluid." Since 1939 material costs have risen 28 per cent and labor has jumped statistically only 17 per cent. These statistical costs do not represent the true picture as is evidenced by numerous bid prices which are up as much as 60 per cent and even higher. It is predicted that the present wild bids which are entirely due to the uncertainty of future changes in labor and material costs will settle down to a net rise of 30 per cent over the 1939 costs. There are some forecasts which look to a rise of 40 per cent and a few pessimists even foresee increases of 60 per cent. School boards cannot meet these rises in cost because their ability to pay has not risen in proportion. The only way out is to revise plans and reduce the proposed size of buildings; ultimately the only solution seems to be help from the "Great White Father."

Dr. Don Essex of the New York state education department described the reasons for the new high costs of school buildings which are based

(Concluded on page 60)

The A.A.S.A. in Chicago

The 1946 sectional conferences of A.A.S.A. in Atlanta, Kansas City, New York, and Chicago have come and gone, and the difficulties which the officers experienced in building up the speakers' lists, in finding accommodations for the meetings and the membership, and in developing enthusiasm and interest for the postwar educational reconstruction program are all expressive of the confusion and uncertainty which are reaching into every field of social, governmental, and economic life in the United States. Certainly the conferences demonstrated that if the A.A.S.A. is to recapture some of the big attendance and a measure of the feeling of importance which appearance on the program, and even attendance at the meeting, carried before the war, there must be a return to a national annual convention.

Dr. Worth McClure, Secretary-Elect, American Association of School Administrators. Dr. McClure will assume his office July 1, 1946.

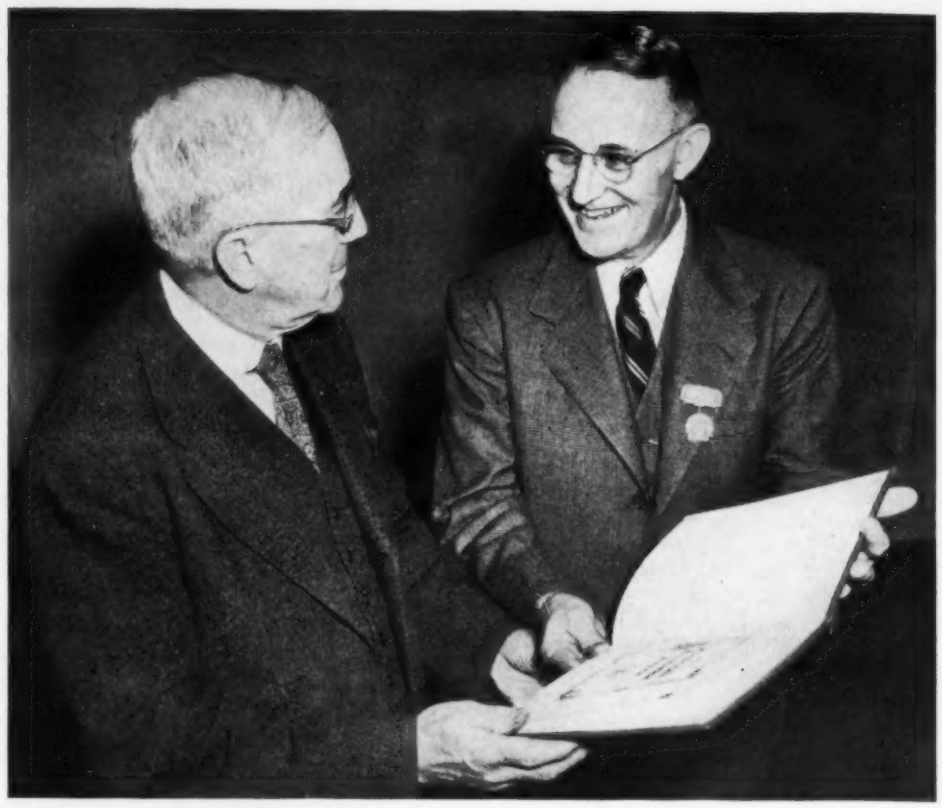
Under the general title of "The Unfinished Task," the conferences applied themselves to the problems of the content of courses for teaching the peace, of health, of veteran and adult education; maintaining the teaching staffs; improving educational finance through improved federal, state, and local support; audio-visual, radio, and television aids to instruction; community population and family life problems; the work of the board of education; and last and very important, the postwar programs of school-plant expansion.

General Sessions

At the Chicago convention Dean Wm. F. Russell of Teachers College repeated in large part the warning he gave in 1943 of the dangers of postwar complacency concerning education and social progress. The defeated nations, he held, will develop new programs of education, while we as victors will continue in power old men and old ideas and will be in danger of falling behind the rest of the world. N.E.A. President Wm. F. Slagle of Kansas City, Kans., urged that peace can be maintained if it is effectively taught in all schools of all nations, and if UNESCO is supported in its work for international understanding and peace. Health education supported by a complete program of instruction, of health services, of school hygiene, of care for handicapped, of safety, was pleaded effectively by Supt. Geo. E. Roudebush of Columbus, Ohio. Quite human and humorous, but vastly serious in the implications of his argument, was Supt. Kenneth McFarland of Topeka, Kans., in a discussion of the personal

and personality aspects of "School Personnel Administration." Dr. E. W. Jacobson charmed his audience with an account of British children and British school conditions, gleaned by a committee of American teachers who visited England. Prof. John K. Norton of Columbia University urged better schools as the basis of better federal and state support of the schools.

As in New York City the convention closed with a plea by a businessman for more and better education as a means of developing still further our economic and social welfare. Eric Johnston, president of the Chamber of Commerce of the United States pointed forcefully to the need of better education of all the people for the continued growth of industry and of business. The development of more technical skills among our farmers, our mechanics, our people in service occupations will all contribute to the betterment of the individual and of his family; greater skills will make for a greater national income and for more economic stability. The two factors go together like an ax head and an ax handle — neither is much good without the other, and cultural education is needed quite as much to develop all the essential cultural, moral, and religious aspects of life.



Secretary Shankland receiving the 1946 Educational award from President J. J. Krill of the Associated Exhibitors.

The Exhibits

The Chicago Conference which was attended by more than 2000 administrators but which also was ignored by the Chicago school administration brought into being a magnificent display of postwar instructional materials. School building equipment and materials, textbooks, significant audio-visual aids, and scientific instructional articles were particularly prominent. The annual dinner of the Exhibitors Association proved to be a high-grade entertainment, the only social distraction which the superintendents allowed themselves. It was the occasion of the highly deserved conferring of the American Educational award upon Secretary Sherwood D. Shankland who is retiring after 25 years of outstanding service to educational administration and to the A.A.S.A.

School Boards at Chicago

School board members participated most satisfactorily in the Chicago Conference. Under the chairmanship of Supt. R. V. Hunkins of Lead, S. Dak., a special meeting devoted to school board problems brought forward a valuable series of papers and a group of brief discussions of methods of handling administrative problems — all presentations of active superintendents and all giving evidence of growing, democratic attitudes on the part of chief school executives.

Dr. W. G. Reeder of Ohio State University established the basis for the subsequent discussion in a scholarly presentation of the basic relations of superintendents and school boards as these have been established in law and modified during recent decades by the practical experience of able and well-disposed executives and boards. Supt. R. D. Case of Salinas, Calif., described 12 procedures which have been worked out in his school system for developing a socially satisfactory atmosphere in school board meetings and for unifying the efforts of the teaching staff, of the executive group, and of the board in the betterment of the school services and the raising of teaching efficiency. The devices described by Mr. Case range from an annual picnic to a definite plan of keeping the board members informed on current school methods and educational trends.

Attorney Harold Norman of Chicago described the vigorous and effective work of the Illinois School Board Association which has a long record of legislative work, of educating new board members to their jobs, and of solving tax problems, and of carrying on a board program of school district reorganization through county surveys.

In a series of three-minute talks a group of six superintendents expressed themselves rather remarkably, and with evident personal experiences in mind, on the problems of "Solving the Practical Problems of Competency of School Board Members."

Supt. R. W. Bardwell of La Crosse, Wis., called attention to the fact that the vast numbers of school board members represent a completely unselfish service, the greatest which a citizen can render to the local community. The superintendent who proceeds democratically with his staff, the parents, and the board, who exercises real leadership and who convinces the board that he is doing the right thing by the schools and the children, can overcome all difficulties. Supt. Harry A. Burke of Great Falls, Mont., described a method used by himself to induct a board of seven members, all new, into the techniques of board action by means of (1) a brief, untechnical monthly report on educational problems, (2) periodic reports on new problems as these arise, (3) staff reports on problems met in the various departments. The most important duty of the superintendent is to help the board members suspend judgment on a situation or a proposed action until all phases are understood, to make clear to members that there is an educational implication in every business action, that they are trustees of the children's welfare. Supt. A. B. Grimes of Boone, Iowa, pointed to the necessity of finding the best men and women in the community for board membership — not the small men who want to get on the board for selfish reasons but those big men who hold back unless they are selected and backed up by a competent, interested group. There is at present in Iowa too little interest in schools and the school board elections bring out only a very small vote.

Supt. C. B. Hayworth of Kokomo, Ind., defined the good school board member as one who has been educated to his job by the superintendent; this member is a man with horse sense, a bit of education, old enough to have good judgment in affairs, and not so young that his enthusiasms run away with him. He should be modest enough to understand that he is not the whole show; of strong moral fiber to resist pressure groups. His loyalty to the cause of the schools must make him carry on for the best welfare of the children without fear. Supt. Elroy Schroeder of Grand Forks, N. Dak., urged the necessity of getting the co-operation of interested civic groups in drafting for election to board membership the most competent persons in the community. Supt. Irvin T. Simley of South St. Paul, Minn., declared that the first duty of the superintendent is to build up complete community confidence in the schools. If this is done there need be no worry that the board elected will not be competent or will fail to do a satisfactory job of administration.

School Building Problems

At a special discussion conference devoted to "School Building Problems" Supt. Claude V. Courter described the "Cincinnati School Building Program" which, following a survey conducted by the Ohio State University Education Department, proposes the immediate expenditure of $21,000,000 for sites, new construction, additions, and remodeling.

Dr. Henry L. Smith of Indiana University urged greater attention to current trends in education which are certain to require greater facilities for community use by adults, broader vocational courses, more physical education, the use of audio-visual aids, the multiuse of larger areas, and other changes which no one can foresee. Dr. John Guy Fowlkes of the University of Wisconsin predicted changes in school services, which will include the expansion of education at the lower level for children of nursery age and at the upper high school level.

The brief discussion from the floor brought out the fact that the building situation is highly confused and that there will be delays in letting contracts until there is more stability in labor and materials.

State Taxation Covering All Governmental Needs

Cameron M. Ross[1]

The power to tax is the power to destroy. There probably is no more vicious and damaging statement in the field of public finance than this oft-repeated battle cry of the demagogue and the politician.

I would like to call your attention to the converse of this statement and propose that school administrators give it all the publicity that the first statement has had. That converse statement is: *The power to tax is the power to create.* Everything which we have in the field of essential public service, public improvements and growth, in fact even government itself, owes itself to the power of the state to tax the individual citizen in order to create things and services for the common good and the public welfare.

The time is fast approaching in many states when the whole tax structure will have to undergo a complete overhauling. When that time comes in your state the educational forces must be on the alert to press their claim, or they will find themselves in the position which has long characterized the support for education. May I illustrate this point by citing the case of my own state — Iowa. In one hundred years of tax legislation from 1839 to 1939 not one single measure was passed recognizing the state's responsibility for the support of education. Not until 1946 has the state assumed any responsibility for supporting education, except for a few minor grants in aid for specific purposes, and then after 10 or 15 years of vigorous campaigning, the General Assembly established the paltry sum of $3,000,000 in state aid, $1,000,000 for supplementary aid, and $2,000,000 for transportation aid or about 3 per cent of the total cost, the remaining 97 per cent being left as a burden upon local property tax.

What is the cause of such a situation? I am convinced that one thing which has contributed quite largely is the insistence by school people upon the principle of fiscal independence. Practically every writer in the field of school finance and administration has enlarged upon this principle. All the colleges of education have taught it. We have come to believe that this is one of the foundation stones of good fiscal policy. No other essential service of the state insists upon it; the state supported higher institutions of learning do not; the departments of roads do not; public welfare and public safety do not; neither do social security and old age assistance. Yet when the financial pie is cut all of these services receive their full share, and the public school takes what is left or else goes back to the overburdened local taxpayers for its share of the crumbs. In Iowa we have fiscal independence to the nth degree, but we find our selves in the position of being "poor but proud," and wholly alone in our fight to secure an adequate base of support for our school systems.

For the past 25 or 30 years all the writers in school finance have denounced the property tax; the writers in the field of general taxation have likewise done so. Quietly one by one the other essential public services have shifted their base of support to the other types of taxation, income tax, inheritance tax, severance tax and the like. If you will examine the record, however, you will find that schools still depend upon the much despised property tax to the extent of about 75 per cent in the total of all the states. Is there any relation between this situation and fiscal independence?

Another long accepted shibboleth has been the statement that the policy of earmarking taxes is bad. We have been taught this and there are some good examples of what has happened when too much reliance has been placed upon this practice. Not so long ago in our state the road interests backed by several national trade organizations vitally interested in roads have quietly moved in and before anybody realized what they were about they had passed an amendment to our Constitution earmarking for all time the proceeds of the gasoline tax for the benefit of roads. I am told this has happened in over half of the states in the Union. Either big business has been taught wrong or we school people have been wrong about the policy of earmarking. Perhaps it is time that we re-examine some of our accepted policies in the light of the ever changing social structure.

In the field of taxation and state and municipal finance we have a great many experts who are recognized as masters of their respective fields. Has it ever occurred to you that, when it comes to dealing with school finance, how unavailable these people are? In our state we hold conventions, conferences, and meetings, and we bring in noted radio commentators, war correspondents, world travelers, and the like, and then we go home with a flow of pride only to discover that the taxpayers' association and other similar groups hold their conferences and bring in such noted authorities as Harley Lutz of Princeton and the like, and when the next session of the legislature convenes, schools as usual come out at the little end of the horn. I do not want to seem too pessimistic but it seems to me that we are going to have to change our methods if we expect education to get its full share of the state's support for its activities. We too often are involved in a real struggle to secure needed legislation and find ourselves alone in our efforts. To be sure we have a whole host of authorities in the field of school administration and finance who are really competent, but they are never available to the groups who need them most and at the time they are needed.

In the field of state taxation the principle of classification of taxes combined with segregation of the source of revenue as between states, government, and local units is gaining wider acceptance. This leaves schools in a relatively bad condition so long as they have to depend upon local property tax for so much of their income and they find themselves standing alone to bear the brunt of the attack of those who would seek to reduce taxes. It seems obvious that one of the first objectives of all school people would be to put the schools on a par with other essential services in the state. In the over-all state budget, schools should have their fair share and when good times or bad come along their budget should be reduced or increased only in the same proportion that other services are.

Legislators are pretty human individuals. They have their likes and dislikes, their ambitions and aspirations, and above all they are keenly aware of what the majority of the people want. We school people meet and discuss, point with pride, view with alarm and then pass resolutions which no one reads but ourselves, then we go happily home and nothing happens. We should learn our lesson from the ward heeler who long ago learned that the way he could deliver his ward when election came around was by pulling doorbells — one by one — not missing any. We school people could learn a valuable lesson from the ward heeler.

To return for a moment to my first point. As soon as we school people abandon our rugged isolationism so well illustrated by fiscal independence and recognize that education is but one of the many essential services of the state, and that the other services deserve and merit our support, then I believe that we shall be in a position to demand our fair share of the state's revenue. I am sure that we shall strengthen our position and secure our rightful place at the first table, rather than have to depend upon the scraps. In order to do this, the rank and file of school people are going to have to know more about both school finance and all state finance, and the experts in the field are going to have to be made available to state organizations when they are wrestling with finance problems. The next few years will see many state systems of finance studied and overhauled. In our own state we have a legislative interm committee working on a complete revision of our whole tax structure. The committee has employed Brookings Institution for the technical work, but unfortunately no authority in school finance is being used. May I suggest that we give serious consideration to a proposal that this body, the American Association of School Administrators, provide a team of its highly capable authorities in the field of school finance, who can be called upon to render assistance to any state, at no cost to the state, or at least a very nominal cost, when such a program is under way in order to guarantee that education gets a fair hearing in the revision of state taxing systems.

More and more as competition for the tax dollars becomes more vigorous will it be necessary that there be some co-ordination of

[1]Director, Division of Administration and Finance, Department of Public Instruction, Des Moines, Iowa. Abstract of address, A.A.S.A., Chicago, March 13, 1946.

the various agencies who are rendering essential services at the state level. It is admitted by all that the state is the best agency to collect taxes. Its political subdivisions can do this successfully only in a limited way. It would seem desirable to develop some over-all budget board representing all the agencies who could adjust the claims of all users of tax money in an equitable manner. I would like to propose that the development of some such plan is the next step necessary for sound educational financing.

Work Experience

Terry Wickham[1]

When most Americans lived on farms family economic survival required children to perform a share of necessary work. It was easy to make a practical division between home and school activities because the formal tools for intellectual growth were scarce and were found only in the schools. On the other hand the tools for manual work were a part of every farm home and the parents took pride in helping their sons and daughters to achieve a high standard of work performance. Today the situation is nearly reversed. Books and other reading materials, the radio and the cinema — instruments for intellectual growth — are as freely available outside the school as in, while the need for children to do real work in urban homes is practically nonexistent.

It is only by having our high schools provide work experience that the great body of American youth can be given its benefits. As the high schools take advantage of the developmental possibilities that work experience offers they will find it increasingly easier to meet the growth needs of the masses of students with which their enrollments are now filled.

Experience of work can definitely make a contribution to two tasks of the high school in helping students (1) select and prepare for an occupation; (2) achieve assurance of economic independence.

1. *Selecting and preparing for an occupation.* Our industrial arts, homemaking, commercial and vocational departments offer to pupils the opportunity to work at several types of occupations as a technique of their exploratory function. To the extent that these work experiences possess elements found in the different occupations — and in the degree that they are made meaningful to the students — they contribute materially to occupational guidance.

For pupils who have made a tentative choice of an occupation it has been for many years a common practice to have them begin work at the chosen vocation while they are still in school. Vocational education, with trades training courses in which students work at a trade, has used work experience as a focus for the organization of instruction in related areas in which the work itself has helped the pupil to prepare himself for competency.

2. *Achieving assurance of economic independence.* Work experience offers an opportunity for close contact with the economic problems of living. When arranged for educational purposes it can develop the understandings and perspectives upon which an individual must build his economic independence. In this developmental task the element of *control* for educational purposes is of paramount importance. The work situations must be real and not make-believe.

The Philadelphia school-work program is an illustration of a large city attempt to adjust the secondary school program so as to afford every high school youth the opportunity to participate in useful work. Some controls built into the Philadelphia program are the following: (1) at the outset there is an interview between the supervisors of the project and the parent; (2) a school representative visits the place of employment to make sure that it meets specified requirements; (3) the employer makes periodic reports to the school; (4) visits to the job, by a school supervisory official, are made as often as necessary.

Among the benefits which Philadelphia pupils obtain from the school-work program are the following: (1) a more vivid sense of the necessity for self-support; (2) a greater awareness of the importance of diligence and co-operation; (3) increased ability to talk to and "get along" with people; (4) greater interest in accuracy that business demands; (5) a sense of security, of "belonging" to what is going on in the world.

Another type of work experience project is that in which goods are produced for the market. For a single illustration, this type is being carried on at Cuyahoga Heights High School, in an industrial suburb of Cleveland. The Cuyahoga Heights project was based upon the production of machine tool products on a subcontract basis, with students and teachers working together in the school machine shop to produce thousands of dollars worth of small parts.

The Cuyahoga Heights project grew to a point where pupils and teachers had to seek customers, to draw up contracts, to keep books, to prepare bills, to deal with organized labor and management, to work out pay rates, and to do other things besides the machine-shop work. One of the unusual features of this project was that each person was encouraged to participate at the point where his or her skill, training, and experience made him most valuable.

The high school which develops a program for making work experience available to its students will be transforming a traditionally disintegrating influence into a constructive asset. Traditionally our pupils have *quit* school to go to work; under the proposed program they will *stay* in school to get work experience. The jobs at which they work may be inside the school or outside; school credit may or may not be given; wages may or may not be received; these matters are merely details of administration. The significant elements are but three: (1) that the school *plan* the program, (2) that the work be genuinely *useful*, and (3) that the school maintain effective *control* of the project.

The school must *plan* the program so that we may be sure that all federal and state statutes as well as local regulations are observed; so that support of the public, and particularly of labor and management, is enlisted; and most important of all, so that the mental, moral and physical health of the participating students is carefully safeguarded. The work must be *genuinely useful* if the values which accrue from it are to be in terms of real life experience as distinguished from book values.

[1]Superintendent of Schools, Hamilton, Ohio. Abstract of address before the Chicago Conference, A.A.S.A., March 13, 1946.

Preparing for a Vocation

Virgil M. Rogers[1]

The educational program of preparing for earning a living and contributing to society should enhance the dignity of labor in all forms and should help to remove the stigma which lingers in the minds of youth against work with one's hands.

The program of vocational education includes business education, distributive occupations (including retail and wholesale selling), shop mechanics, and homemaking courses, and so arranged that a large proportion of the students enrolled would, at one time or another, study in some of these areas. For a more limited number of students, provision is made for instruction in agriculture, airplane and auto mechanics, building trades, cosmetology, electrical, machine, metal and printing trades, and domestic, hotel, and restaurant service.

The vocational program calls for planning for three major groups:

1. For those leaving full-time school at the end of the senior year, supervised employment is provided and may include work experience, apprenticeship supervision, and home project supervision.

2. For those continuing formal education beyond high school, each pupil, under guidance, selects courses which lead to advanced professional study in college or university.

3. For those continuing in the junior col-

[1]Superintendent of Schools, Battle Creek, Mich. Abstract of address before Discussion Group, A.A.S.A., Chicago, March 13, 1946.

lege or community institute, provision is made for study on a part-time or full-time basis and in terminal vocational work or in semiprofessional and preprofessional fields.

The scope of vocational education must be broadened to include everyone and to provide courses under the heading of "required" for all. Some of us need to broaden our concepts about vocational education. It is something more than a group of special courses of intensive training. Effective vocational education should help people to live with each other, as well as to make a living, since so many lose their jobs as a result of inability to live with and adjust to others.

A carefully planned program of vocational preparation calls for a comprehensive guidance and counseling arrangement, to the end that all students will be aware of their capabilities, aptitudes, their fields of probable success, and the major problems with which they may be confronted as they become full-time earners. It is the responsibility of the school to acquaint each student with a range of vocational opportunities through a systematic survey of the total possibilities open to him.

Public education must widen the horizons for each youth, so that his vocational service and his selection of a field of endeavor need not be limited by the class into which he is born or the caste to which he is related — and we still have both in America, no matter how little we care to admit it.

The well-equipped high school graduate must be well informed about public services available to him without cost in the school and after he leaves school while he is in search of a job, also the provisions for getting advanced training for upgrading and for changing jobs.

Looking toward future status as employer and as employee, the students should have a fair understanding of the organization of industry and its relationship to organized labor and organized management. The individual should be helped to understand that conditions of work are determined largely by and through group organization, whether it be under the name of labor union, trade association, or professional association.

Preparation for earning a living should include a general understanding of the arrangements in society whereby the consumer, the employer, and the employee protect themselves through government rules and regulations covering conditions of work for minors, adults, and women, through minimum age and maximum wage standards, minimum hours, safety rules and regulations, industrial compensations, social security legislation, old age benefits, employer liability, and retirement annuities.

There are certain points at which those responsible for secondary education should watch for danger signals. These include the pressure groups concerned with establishing vocational education to meet special industrial interests demands. In Michigan we have taken a long step forward by making the vocational education program a part of the state department of public instruction under the direction of the state superintendent of public instruction.

The returning veterans need our help, and the local public high school is the place where such counsel and information should be available.

The State's Part in Financing Education

Dean M. Schweickhard[1]

Figures brought together by the United States Chamber of Commerce show a close relationship between programs of education and levels of economic prosperity. Accordingly, it seems appropriate that one of the first considerations of any commonwealth should be to determine how its financial resources might best be drawn upon for the support of education. Some states spend as little as 3 per cent of their total income for education while others spend well over 4 per cent, and the differences are reflected in the business, industrial, agricultural, social, and economic life of their citizens.

The question before us today is, "How much of the total cost of education shall be borne by the state as compared with that carried by the local community?" The state's portion has been referred to rather commonly as "state aid" and has varied widely in different states. In too many instances it has been looked upon as a sort of "bait" which schools would be able to sieze by conforming to certain regulations. The better conception is probably to look upon aid from the state as a means of helping the school to attain the standards desired. As a basic principle for sound educational growth it should be agreed that financial aid should be provided by legislative act and the setting of educational standards delegated to the official educational authorities.

If the resources of all communities were alike and there were no differences in the willingness of different districts to support education, there would be little need for state aid, but with conditions as variable as they are the need is considerable. One of the fundamental purposes of state aid is to level *up* such differences and guarantee good educational opportunities to all children of the state.

To begin with, there will need to be a determination of the amount of money which is necessary annually for the adequate education of each child in the state. This can be determined from past and present costs, and the kind of educational program the state wishes to provide for its children. The first step in providing the state's portion of this amount may well be a flat amount in actual dollars, which will be the same for each child in every district of the state, probably based on well-regulated enrollment records. This will constitute the first block in a three-block diagram representing the total amount to be made available per child and will be the same for all districts.

The second block will represent the amount to be supplied per child from the local community and will vary from district to district in proportion to the amount of wealth behind each child. If there is enough local wealth per child, the entire amount beyond the state's basic contribution can be raised locally. The diagram will then be a two-block picture and no further contribution will be forthcoming from the state. Where such is not the case the state will need to provide additional funds for purposes of equalization.

As an example, suppose the amount considered necessary to provide a foundation program for each child is one hundred dollars, and the state starts with a basic allotment of forty dollars. There will still be sixty dollars to raise from some source. Suppose, further, that a local community might be expected to raise up to three dollars for every one hundred dollars of property value per child without assuming an undue financial burden. This would mean that any district having property value of two thousand dollars or more per school child could raise the remaining sixty dollars and would need no additional assistance from the state. As property value dropped below two thousand dollars per child, the state would need to provide an additional three dollars for each drop of one hundred dollars in property value per child. With the amount of the basic allotment established and an equalization table set up, calculation of aid would simply call for the total property value in the district and the average number of children on the roll throughout the year.

In order to compensate for differences in the cost of a foundation program in the secondary school and the elementary school, secondary school pupils figures should be equated at a predetermined ratio of one and five tenths or more as individual state experience may suggest. Also the excessive cost of making the foundation program of education for special class children equivalent to that provided for normal children, an equation ratio will need to be used. This applies to children who are deaf, blind, crippled, or subnormal. For nonresident pupils the school where the child attends should receive the basic allotment from the state and the balance from the home district, with the ratio between state and local funds determined by the wealth per child in the home district.

Calculation of the cost of a foundation program of instruction takes into account only the items of operating expense common to all districts and does not include capital out-

(Concluded on page 60)

[1]State Commissioner of Education, St. Paul, Minn. Read before the A.A.S.A. Conference, Chicago, March 14, 1946.

The American
School Board Journal
A Monthly Periodical of School Administration
Edited by
Wm. Geo. Bruce and Wm. C. Bruce

SCHOOL BOARDS IN 1946

THE administration of city school systems in 1946 is not too unlike that which the senior editor sought to help when he prepared the printer's copy for the first issue of the SCHOOL BOARD JOURNAL.

At the risk of oversimplification it may be said that the present administrative problems center around the basic notion of democracy in action and the principal tasks are the setting up of educational policies and programs, of keeping in motion competent supervisory and instructional staffs, of providing the physical plant and the instructional apparatus, and finally of finding the funds for running the entire organization. The technical progress in educational science and teaching method, the improvement in organization and curriculum, the breadth and inclusiveness of the school services, the betterment in school plant and equipment, the growth in the efficiency of the conduct of school business, the continued generosity of the public in providing funds for the steady rise in all school costs — all these phases of school growth have been among the wonders of American progress.

Even the sharpest critics of present-day school boards — and much can be said concerning the shortcomings of individual members and entire boards — these critics will admit that partisan politics and personal ambition have been reduced to a minimum, that there is a clearer understanding of the policy-making function of the board, that educational initiative comes principally as it must from the superintendent, and that the execution of plans and programs is almost entirely left in the hands of the technically trained supervisory and teaching staffs.

The unsolved problems before the school boards are vastly more complicated in 1946 than they were 55 years ago. But we are also better prepared to meet them — all the progress in thought and the accumulated experience of the years can be put to work to upbuild schools and a program of education which will help the individual to reach his spiritual destiny, to make our society peaceful, politically and economically equalized, and in all respects to achieve the purposes implied in the Judaic-Christian tradition of life.

ADULT EDUCATION

WHILE the solution of the problem of further education of veterans will be largely in the hands of the colleges and vocational schools, the entire task should not be side-stepped by the city and town school administrations but should be accepted as an opportunity to make effective the entire program of postwar adult education. Much of the education of the veteran is a personal task in which an inventory study of the individuals coupled with competent guidance must be followed by the type of courses best suited to reach the planned goal in the shortest possible time. Success or failure will depend further upon the attitude of the teachers and the method of instruction — group work and ordinary class techniques will in many instances have to give way to personal instruction and to the use of materials and means which correspondence schools and college tutors have found effective.

The usual program of adult classes in the city schools has been too much a matter of mass education. The elementary school or the high school situation and the attitude of the teacher of children have harmed the approach to the mature man or woman. More and more it is necessary to learn what the adult student wants and what he actually needs, to guide him into studies from which he is prepared to benefit, and then to carry him forward in a manner that his interest is maintained, and his sense of achievement aroused to want to complete the work.

The community value of adult classes can best be judged by their holding power and the results achieved with the individual. The task is one which only the most competent teachers can achieve.

THE TEACHER'S HEALTH

A COMMENTATOR on school health problems has recently called attention to the fact that pupils are protected from health hazards arising in their teachers but that the latter are not safeguarded from dangers originating among the children. The situation might be corrected, he holds, by greater attention to the health of children and by more stringent rules for the exclusion of all pupils who are ill.

This complaint is entirely justified. Any health danger to which the teacher is exposed is harmful not merely to her but also to the class for which she is responsible. If she remains at her post while indisposed, her reduced efficiency affects not merely herself but the twenty or thirty children before her. If she is absent during illness, there is also a distinct loss, particularly where the newly liberalized salary schedules provide for so-called sick pay.

In the employment of new teachers, school teachers are more than ever under obligation to engage only well men and women and to require a complete physical examination, with attention to lungs and heart and consideration of the general ability to withstand the nervous, mental, and physical burden of teaching. An annual or biennial examination of all employed personnel is not merely advisable; it is a necessity particularly among the older staff members. And it should be made clear that these good people may look upon an annual checkup as a splendid means of discovering incipient trouble and of preventing the growth of a bad condition by medical care and occupational and personal adjustment to age or organic change.

The teacher's stake in good ventilation, sufficient lighting, thorough cleanliness and dustlessness of the school building is too often overlooked by school administrators. Industry has found that attention to hygienic conditions and maximum comfort pays well in production and employee contentment; school authorities will realize similar returns among their teaching staffs from well-cared-for school buildings.

CHILD LABOR AGAIN

THE work of children which appeared so valuable for the war effort during the years 1941–45, especially at the 14- and 15-year levels, is likely to become a permanent element in the economy of 34 states unless school authorities co-operate with social welfare groups for early legislation raising the school leaving age to 16. The war period represented definite losses for child labor in spite of the efforts of educators and of state and federal law-enforcement agencies, and these may become permanent unless the present period of reaction is utilized to the full.

It seems completely unnecessary to repeat that children of 14 and 15 are too young to work all day and to assume the physical, the emotional, and the mental wear and tear of the full-time wage earner. And still it will be necessary for schoolmen to repeat these old-established truths and to point out the need for rest, adjustment to suitable occupation, and recreation which the adolescent must have up to the age of 16 and even 18. No child under 16 has the educational equipment sufficient for any occupation which will provide a

sufficient wage to make him an economically independent citizen. In the trades, in the service occupations, in farming, it is only the mentally and physically most competent young people who can rise from the commonest types of work or acquire for themselves the technical skills and the knowledge essential to success.

For the schoolman the upward revision of the school leaving age will present the task of doing something specific for those who find it socially or economically difficult to continue to the age of 16. In rural areas there is the obligation of providing accessible high schools; in the cities the adjustment may be achieved through guidance and the development of industrial-arts and vocational subjects that will hold the interest of even the most troublesome youngsters. The work-experience program, the possibilities of which have not yet been explored, seems to fill a gap here and to provide a means for easing children gradually into industry at 16, or better still at 17 or 18, while continuing the beneficent guidance and supervision of the school.

It is high time that child labor be reduced by substituting for it an educationally effective program supported by both public sentiment and legislation.

A NEW SECRETARY

THE A.A.S.A. is to be congratulated upon the choice of Dr. Worth McClure of University City, Mo., as its executive secretary to succeed Sherwood D. Shankland.

Dr. McClure comes into the work at a time when more than ever there is need for wise leadership in the work of the association — leadership based on practical experience in the administration of city schools and in the multifarious jobs of handling public relations and securing cooperation of widely differing groups of people. The new secretary, who will assume office in July next, has a splendid record as principal and superintendent of schools in Seattle and recently in a St. Louis suburb. He has been an organizer, a forward-looking administrator, and withal a genial scholar who will carry on the important work of the A.A.S.A. with vigor and a keen understanding of its serious responsibility to American education.

Whom, then, do I call educated? First, those who manage well the circumstances which they encounter day by day and who possess a judgment which is accurate in meeting occasions as they arise and rarely misses the expedient course of action. — Socrates.

Governor Thye of Minnesota confers awards for Distinguished School Board Service to Judge A. H. Enerson, Marshall, and Dr. Carlus Selvig, Harmony, Minnesota.

MINNESOTA SCHOOL BOARD MEMBERS RECEIVE DISTINGUISHED SERVICE AWARD

At the annual convention of the Minnesota School Board Association held at the Nicollet Hotel, Minneapolis, on February 14, two "Distinguished Service Awards" were given by the National School Service Institute. The Honorable Edward J. Thye, governor of Minnesota, made the presentations.

This award was established at the convention in 1944, and the first winner of the award was Dr. E. E. Novak, president of the board of education, New Prague. Dr. Novak was chosen by the executive committee of the Minnesota Education Association, who also chose the winners of the 1945 and 1946 awards.

The "Distinguished Service Award" has now become an important and coveted award among school board members. It is not an easy award to win, for the contribution to education must be definite. The member chosen must first of all have the welfare of children at heart; he must have a long-range view of a program for the betterment of educational opportunities of school children; he must insist on a good professional staff and adequate, modern teaching and learning tools. A sound budgeting and financial program, better housing, better citizenship, reduction of delinquency and improvement in the educational opportunities of our school children are some of the points on which the school board member is judged and awards made.

Due to travel and hotel restrictions in 1945, the school board convention was not held; and therefore, this year two awards were made, one for 1945 and one for 1946.

The winner of the 1945 award was Judge Albert H. Enerson of Marshall, Minn. Judge Enerson was on the board of education in Lamberton, Minn., for 25 years. Through his efforts the Lamberton Consolidated School District, one of the first of its kind in Minnesota, was organized, and a school plant was built. Horse-drawn buses transported the children to the consolidated school. As a lawyer, school board member, county attorney, and judge of the district court, Judge Enerson championed fearlessly for educational progress and civic betterment. He taught for several years, then studied law and practiced his profession in Lamberton, until he was appointed judge in 1945, when he moved to Marshall.

The 1946 award was presented to Dr. Carlus Selvig of Harmony, Minn. Dr. Selvig was born in Rushford, Minn. He is a graduate of the College of Dentistry of the University of Minnesota. He served as mayor of Harmony for 8 years. He was clerk of the school board for 9 years, and its president for 24 years. He upheld the cause of teachers and children against all opposition. It was through his efforts that a new high school was built, and bus routes extended to serve rural children. Dr. Selvig's interest in community and civic affairs is unflagging. He now has under way a beautifying project for Harmony, which will include the park, school grounds, adjoining church property, and the street and highway on which the school is situated.

Governor Thye in making the presentations said in part: "Men like you who have unselfishly devoted every thought and effort over these years to the educational question and its development in your community have furthered education and the opportunities of youth. You have set an example for the young school board members who follow you."

Mr. Morris Bye, superintendent of schools at Anoka, is chairman of the award committee. In addressing the group Mr. Bye said, "The Distinguished Service Award really honors the work of all school board members in the state. The records of the men who have received these awards are really symbolic of the unselfish and devoted service to education of school board members generally in the state of Minnesota."

Federal, State, Local Relations at A.A.S.A.

Theories and Conditions in Educational Organization

Edgar Fuller[1]

We are here today to explore the possibilities for improving our educational organization. Our time will be well spent if we suggest a few practical ways to make our complex local-state-federal educational system operate more effectively. The central problem is how to get educational efficiency within our framework of democratic checks and balances and at the same time insure the continuous interest and participation of the people who live where the children go to school.

Our point of departure must, of course, be the American system of education as it is established. The Federal Constitution does not mention education; obviously, the states did not delegate specific educational powers as such to the Federal Government. The Constitution, by implication, leaves education to the states or to the people. It is a state function.

The principle of state responsibility is fundamental in our educational organization. Most of the difficulties we have had in local-state-federal educational relationships might have been avoided if educators, government officials, legislators, and the Congress had understood this principle and had acted in accord with it. The states have delegated most educational authority to their respective local school units, but they cannot delegate final responsibility for education itself. The responsibility of the state for its educational system is inescapable.

The organization of education as primarily a state rather than a national responsibility was necessary to perpetuate the democratic school systems established in colonial days. It was necessary because any power delegated to the Federal Government by the states cannot be reclaimed by the states without the consent of the Federal Government. It was clear to the founding fathers that a single national system of education must be dangerous for democracy when the path of power leading to Washington was deliberately made a one-way thoroughfare. It is just as clear today. The constitutional limitations on the educational powers of the Federal Government still exist in theory, as they did in 1793, but the most important modern development in constitutional law as it affects the schools is that they no longer exist in fact. These constitutional limitations have been undermined collaterally by political, economic, and social conditions which have led to new interpretations of such constitutional clauses as general welfare, due process, and provision of the national defense.

A Partner in Education

The Federal Government is now a full partner in education. We may mention a few of the steps through which this has come about. A national Department of Education was established in 1867, presumably under the general welfare clause of the Constitution, to collect facts, diffuse information, and promote the cause of education. The general welfare clause has also been relied upon to justify such federal educational activities as the land grants of 1862, the Smith-Hughes and other vocational education acts, the rehabilitation acts, the Civilian Conservation Corps, and the National Youth Administration.

From quite another direction, the Oregon case in 1922 limited the educational power of the states by holding that the due process clause of the Constitution preserves the right to conduct a private school, even though a state law had decreed that all children should attend public schools. The part of the Fourteenth Amendment which gives colored persons full civil rights obviously applies to education, even if the Federal Government has been slow in recognizing and enforcing its educational implications. Its enforcement makes federal educational aids available without regard to color, of course, and tends to improve the relative educational position of the colored race.

Increased federal impacts on education in the cause of national defense began in 1940 and, as you know, remain an important current problem.

We must conclude that our educational structure has been changed fundamentally because Constitutional interpretation has greatly increased federal powers. There is seldom a lack of educational authority in the Federal Government today. When we observe that the federal income tax has drained off the financial resources of local communities, and has made it easier to spend money in the Federal Government than anywhere else, there is every reason to expect as much federal educational activity in the future as the people will permit.

It is because of unforeseen circumstances, and in spite of original Constitutional intentions, that the Federal Government is now such an important partner of the states and local districts in education. More and more the states and localities are finding themselves in positions where they cannot have effective schools without federal participation. There is no reason for blind opposition to such participation. The federal colossus shall not overwhelm us, for within Constitutional limitations the states and localities are in a position to say, and have the responsibility to say, how the Federal Government shall participate in education. Both the Federal Government and the schools, after all, belong to the people, and the people do not want a centralized national educational system because it would be a danger to democracy.

Federal Aid Without Control

What, then, should the Federal Government do in education? It is easy to be negative. The people do not want the Federal Government to finance the schools operated by the state and local agencies in ways that involve control of the educational programs as a condition for supplying federal funds. This has sometimes happened in vocational education since 1917. If the entire educational program were like this there would be almost the equivalent of full federal operation. No federal participation in education is justified which will lead the Federal Government to control either the teachers in the schools or what they teach.

It is fortunate that we know ways to have federal aid for education without seriously affecting the state and local administration of educational programs. The school lunch law, for instance, is in a broad sense an aid to education. It does not interfere with, but rather aids, the local program in the schools. Federally supported school health programs are in the same category. Well-planned and permanent schoolhousing programs could move federal funds to the local school districts with, at worst, only temporary federal controls. Upon completion of the housing, federal supervision would no longer exist, and the federal influence would always have been somewhat removed from the educational program.

Federal assistance need not be restricted to direct material aids. Services of all kinds, including those concerning educational programs, can well be supplied, provided no financial or other incentives except the inherent value of the services themselves are used to influence the states and local districts in their freedom to accept or reject them. All the original functions given to the national Department of Education in 1867 — to collect facts, diffuse information, and promote the cause of education — are clearly appropriate.

Another federal function is to influence, through presentation of educational viewpoints, the great programs of various non-educational departments of the Federal Government. This should occur in Washington during the formative stages of these programs, in order that they might contribute to the educational progress of the people they affect. We shall refer again to this important function of national educational leadership.

Still another federal educational function is to represent the United States in important international educational organizations, such as UNESCO. Another speaker will discuss this problem in more detail.

If the Federal Government must be dealt with so carefully in education, one may ask, why is it adequate for the protection of democracy to vest the educational power in the states? After all, the states themselves may easily violate democratic principles. In dealing with the communities where children go to school, and in dealing with the teachers and children themselves, is there not great danger that democracy may suffer in a system where the educational authority of the state

(Concluded on page 58)

[1]State Commissioner of Education, Concord N. H. A paper read at the New York Conference, A.A.S.A., March 6, 1946.

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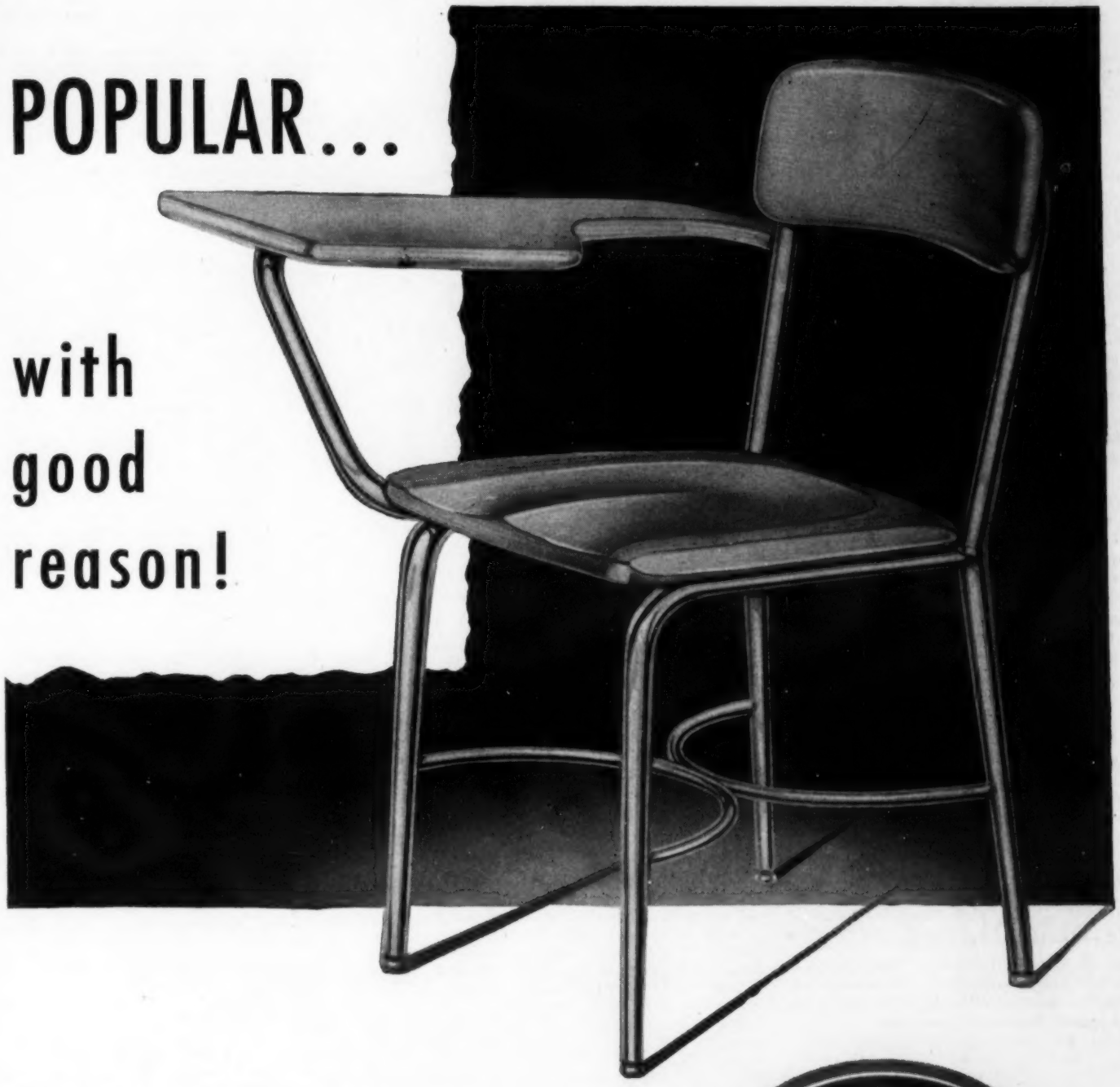

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(Concluded from page 56)

which has been delegated to its local school districts may be reclaimed by the state at the will, or even at the whim, of the state legislature?

State Powers Well Justified

The answer is that the constitutional compromise between democracy and educational efficiency which vested the educational power in the state has, in general, been justified by experience. Most states, through their legislatures, have delegated educational authority freely to local school districts. The members of state legislatures are very close to the people. They, like their constituents, have so prized local autonomy in education that the state is often in fact the weakest link in the local-state-federal chain of educational authorities. Ineffective state departments of education can be traced to restrictive state constitutions and state laws designed to keep the states weak in educational authority. Thus the people in the states have leaned backward to insure educational democracy so far as preservation of local autonomy could do this. They have sacrificed much educational efficiency in the process.

It would not have been necessary to restrict state departments so much if they had known how to lead local educators rather than try to drive them. The strongest and most effective state departments work on a service basis rather than on the basis of controls over local schools, and such departments operate with the full support and co-operation of the local school authorities and the people.

So far as the state is concerned, then, the *theory* is that education is a responsibility of the state. The *condition* is that the states have been assigned, in most cases, relatively

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Mr. Jones Resigns Business Managership

Samuel D. Jones, Louisville's first business director of public schools, has tendered his resignation to the board of education, effective with the appointment of his successor.

Mr. Jones has served continuously since 1909, with the exception of a year and a half, when he was in the United States Army during World War I. In 1908 through the efforts of the late Albert S. Brandeis, Dr. I. N. Bloom, John B. McFerran, John M. Atherton, and other interested citizens, the General Assembly of the Commonwealth of Kentucky enacted a law creating the office of business director, "who shall be the executive officer of the board." On March 15, 1909, at a called meeting of the old Louisville school board, Mr. Jones was elected.

The old school board was, as many can remember, a political board consisting of 14 trustees, 7 Democrats and 7 Republicans, representing the respective districts in which they were elected. The trustees appointed principals, teachers, janitors, and engineers to serve in their respective capacities in the schools in their district. It was the delight of the trustees in those days *to visit* (as they ofttimes expressed themselves) *their schools to confer with their appointees.*

On the evening of March 15, 1909, when the president of the board, the late Dr. I. N. Bloom, called for the election of a business director, the secretary read the names of 16 applicants. The Democrats and Republicans each had a candidate, and the ballots were cast on strictly party lines; consequently there was no election. Finally, to break the deadlock, Mr. Jones, who was an

Mr. Samuel D. Jones
Louisville, Ky.

Independent in his political affiliation was presented as a candidate. A Democratic member joined the Republicans and elected Mr. Jones on the thirteenth ballot.

Pursuant to authority vested in him, Mr. Jones established his office. When the trustees who had voted against him realized that the creation of the office stripped them of authority and prestige, except in advisory capacity, they began to try to find ways in which they could remove him from office, but to no avail. They did everything to harass him, until he began to feel that it was useless to try to lift the schools out of politics. He informed Dr. Bloom, that under the existing circumstances, he could not accomplish what was expected and announced his intention of resigning.

However, Mr. Jones was assured that there was a movement on foot by the good citizens of Louisville who were interested in the public schools, to sponsor legislation for a commission form of government for the schools. This law was enacted in 1910 and the new board of education, of five members elected at large, assumed control on January 1, 1911.

Much has been accomplished during the 37 years of Mr. Jones's service with the board. During the period (1909–10) of the old trustee system of school government, two new school buildings were erected, from funds received from the general appropriation. In the first two years of the new board's jurisdiction (1911–13) a senior high school was remodeled and an addition erected, and additions to two old elementary schools were completed. Also during this period the first school improvement bonds were approved by the voters. Thereafter other bond issues were approved, enabling the board to erect two senior high schools, two senior-junior high schools, seven junior high schools, eleven elementary schools, twenty additions to existing buildings. The Theodore Ahrens Trade High School was erected and completed through the generosity of the late Mr. Theodore Ahrens. Other building projects consisted of remodeling two buildings and erection of an addition for the colored high school, remodeling one elementary school; remodeling a former high school building for an administration building, and remodeling one building for offices and warehouse. The erection of the buildings and additions required the purchase of sites, as well as land for enlarging sites to provide ample playground areas.

In 1922 certain territory in the county, including school districts, was annexed by the city, and the board acquired the school property located therein. Some of these buildings were remodeled, four new buildings and additions to some of the old buildings were erected, and some of the buildings abandoned.

The expenditure for buildings during this period totaled $8,465,000; for additions to existing buildings, $1,614,200; new sites and enlarged playgrounds, $1,209,800; or a total of $11,289,000.

In 1909 there was no inventory of property or supplies, no supply department or maintenance department of any consequence, and the buildings and equipment only partially covered by insurance. Today the inventory represents a school plant of $15,000,000 in buildings and equipment, and school sites, playgrounds, and stadiums of $1,500,000. The school buildings are inspected at regular intervals by the safety and health authorities, and the elimination of possible hazards has made it possible to secure the lowest insurance rates. Fire and extended coverage insurance is carried on a general schedule, and distributed equally among *bona fide* agents doing business in Louisville.

When Mr. Jones took office there were 51 school buildings — there are now 74 in operation.

A complete maintenance department was established in 1909, and has proved of great value, as it has effected the saving of considerable money. The expenditures in this department vary each year, depending on the funds available. However, the yearly expenditures average from $75,000 to $100,000. A maintenance force of forty mechanics, repairmen, utility men, laborers, and truck drivers, is now employed.

In addition to the erection and maintenance of the buildings and grounds, the purchase of educational and operating supplies has accounted for the expenditure of many thousands of dollars yearly. A supply department with a central warehouse was established almost immediately after Mr. Jones took office. Instead of purchasing from one or two firms, as had previously been the custom, competitive bids were invited, and contracts awarded for approximately 85 per cent of the necessary supplies, including coal. Specifications for supplies have been standardized as much as possible, and the material and equipment is delivered to the supply department to be sent to the schools as needed. More than 4500 items are included in the specifications each year; some 250 to 300 firms offer bids, and approximately 200 contracts are awarded.

Under the old board employees were appointed by the trustees in terms of friendship and their ability to best serve their political party. Today, they are appointed for their ability to satisfactorily perform the duties assigned them. The first and greatest requisite, however, is morals above reproach, and temperament satisfactory for service among the principals, teachers, and children.

For many years past it has been hoped that the board would have sufficient funds to consolidate some of the old schools which are poorly lighted, without gymnasiums or assembly rooms, and without ample playgrounds. They are located within a radius of from three to six blocks each, and the advantages of consolidations in new modern buildings with ample playground area can readily be seen, not only in education, but for maintenance and operation as well. This project, together with a number of improvements and replacement of old buildings, is contained in the postwar building program now being considered. As Mr. Jones stated, "it is my sincere hope that some day my dream will come true and that the Louisville school plant will be vastly improved."

JANITORS' SUMMER SCHOOL

June 19–21. Custodian short course at Ames High School, Ames, Iowa. Engineering Extension Service, Iowa State College, Ames. Tommy Thompson, Los Angeles, guest instructor.

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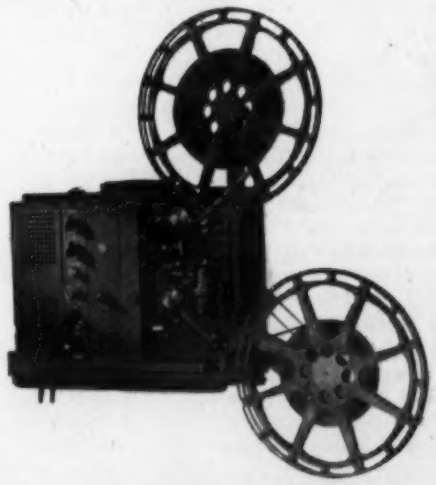

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(Concluded from page 49)

not only on higher labor and material prices but also on the enlarged cubage necessary to provide children with the new services in physical education, shopwork, music, libraries, and cafeterias. Using as an illustration a building erected in 1932, Dr. Essex showed that although the first cost of a structure in that depression year may have been $200,000, the high cost of bonds which netted an average of 5½ per cent in a 30-year serial issue will bring the ultimate cost up to $575,000. A building of similar size and pupil capacity would cost $480,000 in 1945, but the low interest rate for borrowed money, which can now be had at about 1½ per cent, will bring the final total cost to only $595,000. Thus the real additional cost in spite of present high prices for materials and labor is only $20,000.

Dr. Essex argued that (1) the cost of building construction should come down from the present excessive highs and that school authorities should campaign in this direction. (2) For three decades past the cost of building has been considerably above the cost of living and this fact must be considered in state and local financing provisions. (3) The high cost of building has so outstripped local tax ability that federal and state aid will be needed if the situation is to be met. Dr. Essex concluded his address with an explanation of HR4499 — S1719 bills for federal aid under which one and a half billion dollars would be made available through the Office of Education for local school construction aid during a seven-year period.

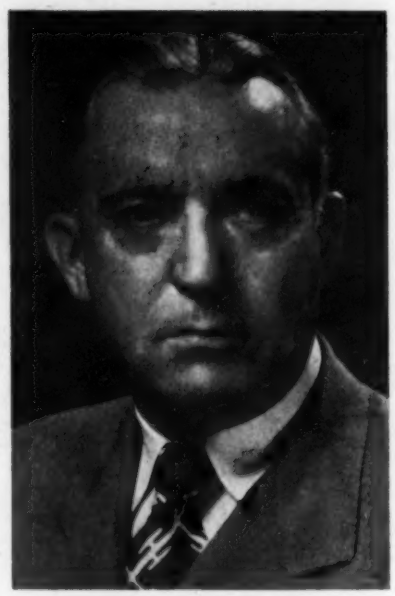
John E. Marshall of West Virginia outlined the help which a modern school code of the progressive, flexible type can give school authorities and architects in adequate school planning.

In the general discussion it was made clear that active school building construction cannot begin until very late in 1946 because of the uncertainty of costs and materials. One important firm of school architects was mentioned as recommending that all letting of bids be delayed until 1947.

The Later Sessions

At the second general session Superintendent John L. Bracken of Clayton, Mo., outlined the proposed "Modern Health Program" advocated by a joint commission of health, medical, and educational organizations. Dr. Paul R. Mort of New York departed from his announced discussion of "Lay Leadership in Education" to describe the types of professional problems which the Metropolitan School Study Council is uncovering in order to bring its own leadership into focus and to help develop action among lay leadership groups. Dr. N. L. Engelhardt, substituting for Dr. Conant of Harvard, discussed the aid which American schools should give to foreign schools if the latter are to become helpful in achieving the peace purposes of UNO. Superintendent James L. Hanley of Providence R. I., urged the development of better teacher morale as the finest means of "Conserving Human Resources." Dean Ernest O. Melby of New York University called attention to "Problems of Professional Personnel" which he held can be solved largely by raising the teaching profession to the stature of such professions as medicine, law, and engineering. The real problem is to attract the most able young people by holding out the financial and social rewards which the older professions provide and by assuring teachers of independence, opportunity for creative service, and security.

The convention closed on a constructive note provided by a layman, Thomas C. Boushall, president of the bank of Virginia and chairman of



Mr. Arthur J. Crowley, New York, N. Y. President, National Council of School Board Associations.

the committee on education of the U. S. Chamber of Commerce. Mr. Boushall pointed out the fact that business is interested in schools because education provides workers in manufacturing and service sections of business with technical skills and creates both the intelligent desire and the financial ability for greater consumption, thus making for a beneficent spiral which helps the total economic well-being of the United States. To provide funds for the new high costs of education he held that business should and is willing to provide additional funds. These funds should come from employers on the basis of a fixed annual amount, say $30 to $50, for each employee. Such a tax would place the cost of training exactly where it belongs, and would return the income both to the rural and the city areas where it is needed.

The resolutions in briefest form reiterated: (1) There is a continued need of equalizing educational opportunity through federal aid. (2) The AASA welcomes UNO and UNESCO as a means of creating world peace and pledges its support. (3) High schools and colleges are urged to adjust courses and methods to provide a high level of education for returning veterans. (4) The Conference expressed its appreciation for the fine quarter century services of Secretary Shankland who is to retire in August, 1946.

The Commercial Exhibits

The Conference enjoyed the benefits of exhibits of school furniture and equipment, instructional materials, and textbooks shown by more than 150 prominent firms in the educational field. John J. Krill, president of the Associated N.E.A. Exhibitors expressed the appreciation of the group for the privilege of sharing in the great tasks of postwar education through scientifically improved devices which will assure maximum teaching success in the classroom, its laboratory, and the school shop.

The attendance exceeded 1500 members.

NATIONAL COUNCIL OF SCHOOL BOARD ASSOCIATIONS

The reorganization of the National Council of School Board Associations which was begun at Springfield, Ill., last fall was given a strong forward impetus at Chicago on March 11 and 12 when the executive committee met to reaffirm the officers who are to serve temporarily. The meeting decided to make the council a factor in helping the state associations solve their problems and to aid in the constructive development of educational policy and the training of American youth. The council has at least five major purposes, among which the comparative study of state educational programs, the adequate financial support of education, and the analysis of federal legislation are most prominent.

The officers to serve until the next annual meeting scheduled for the week of the 1947 A.A.S.A. convention include: Arthur J. Crowley of New York, president; Fred C. Thatcher, of Louisiana, first vice-president; Charles T. Whittaker of Idaho, second vice-president; Robert M. Cole of Springfield, Ill., executive secretary and treasurer. I. E. Porter of California who inspired the formation of the council will act as a member of the executive committee.

A total of 21 state associations have accepted membership in the council and five further associations are expected to join in the near future.

THE STATE'S PART IN FINANCING EDUCATION

(Concluded from page 53)

lay. Where pupil transportation is involved, it represents an expense over and above the regular cost of instruction and should be treated as a separate consideration, shared even more heavily by the state.

It may be proposed that a greater portion of the burden of school cost should be shifted from real property to other sources of revenue. This would mean decreasing the local share, since that comes largely from real property, and increasing the state's share because the state has a larger variety of sources upon which it may draw. The equalization feature should be retained as a means of compensating for differences in local or district resources, but for the state to attempt the full support would undermine the invaluable element of local interest which comes from helping to pay the bill.

The division of cost between the state and the local district should be such as to equalize educational opportunity for all children of the state. Sound provisions in that direction will help to overcome differences in the circumstances of birth and residence, and will elevate the level of citizenship and living for the entire state.

SCHOOL BOARDS AT KANSAS CITY

At the Kansas City conference of the American Association of School Administrators on February 21, a group of school board members discussed the problems of city school administration as these are developing in the postwar period. Butler Disman, president of the Kansas City board of education spoke on the school board member as "Public Servant No. 1." Leonard A. Steger, superintendent of schools of Webster Groves, Mo., described the relations of the superintendent and his board and urged the professional responsibilities of the chief executive. Teacher-Board relationships were discussed by Harry G. Barnes, executive secretary of the Iowa state education association. The opportunities of state school board associations in bettering local school systems and assisting in needed legislation were discussed by Calvin Grieder, professor of education, University of Colorado, Boulder, Colo. Chairman of the program was N. D. McCombs, superintendent of schools of Des Moines, Iowa.

The entire conference brought together 1400 superintendents and lesser school executives to discuss the "Unfinished Task" left for the schools to accomplish in the postwar era when the peace of the world as well as our own domestic happiness will depend upon an educated, disciplined citizenry.

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School Law

Schools and School Districts

School board members who sign a written order and procure delivery of supplies pursuant thereto are personally liable thereon.—*American Asbestos Products Co.* v. *Independent School Dist. No. 14,* 164 P. 2d 619.

School District Property

The fact that a public meeting in the school auditorium attracts people who otherwise would not enter school premises, thereby enlarging risk of injuries to persons attending does not relieve school district of liability therefor as owner and manager of property, and it must assume expense of public liability insurance. St. 1941, pp. 690, 691, §§ 19401, 19439.—*Ellis* v. *Board of Education of San Francisco Unified School Dist.,* 164 P. 2d 1.

A school district cannot require payment of rent for free meetings pursuant to Civic Center Act in school auditorium, nor require sponsors of such meetings to compensate district for ensuing costs of maintenance and management, but must bear burden of such costs. St. 1941, pp. 690, 691, §§ 19431–19439.—*Ellis* v. *Board of Education of San Francisco Unified School Dist.,* 164 P. 2d 1.

A regulation, adopted by unified school district board of education, that parties requesting free use of school building auditoriums for public meetings, pursuant to Civic Center Act, furnish public liability insurance policies in district's name, was invalid. St. 1941, pp. 344, 690, 691, §§ 2204, 19401, 19433–19435, 19437, 19439.—*Ellis* v. *Board of Education of San Francisco Unified School Dist.,* 164 P. 2d 1.

A binding contract against a school district can be made only by its board of education in regular session.—*American Asbestos Products Co.* v. *Independent School Dist. No. 14,* 164 P. 2d 619.

School District Claims

Where no list of registered qualified voters of county or school district was filed in office of clerk of superior court during 1944 and 1945, school district bond election held on May 19, 1945, was invalid because there were no legally registered qualified voters in district who could vote in the election, notwithstanding that registrars made up a list of registered voters of county and left it in tax collector's office. Code §§ 34–404.—*Lumpkin* v. *State,* 36 S.E. 2d 123.

Teachers

The regulation of New York City board of health, requiring teachers and other school employees to procure medical certificates of their freedom from active tuberculosis, is not arbitrary or capricious, but reasonable exercise of power vested in board by city charter to protect public health. New York City Charter 1936, § 558, subds. b,c; Const. art. 17, § 3—*Conlon* v. *Marshall,* 59 N.Y.S. 2d 52.

The individual members of a school board are liable in damages for breaching a contract with a teacher employed by them. KRS 161.790.—*Race* v. *Humphrey,* 190 S.W. 2d 686, 301.

Where members of school board breached contract with teacher and teacher unsuccessfully attempted to procure employment from three school boards nearest her home, the teacher made reasonable endeavor to minimize damages and was entitled to recover an amount equal to salary she would have received had she been permitted to teach remainder of term covered by her contract.—*Race* v. *Humphrey,* 190 S.W. 2d 686, 301 Ky. 10.

The exercise of discretionary powers under civil service and teachers' tenure statutes must be in good faith and based on actual conditions, and courts do not approve discontinuance or abolition of position, transfer from one position to another or reduction of salary, where real motive is to remove employee from his position without justification. Ill. Rev. Stat. 1943, c. 122, § 136c.—*Wilson* v. *Board of Education of School Dist. No. 126 Union,* Madison County, 64 N.E. 2d 380.

A school district board's transfer of district superintendent of schools to position of school principal at reduced salary without notice and hearing or assignment of cause constituted "removal" from position as superintendent in violation of teachers' tenure statute. Ill. Rev. Stat. 1943, c. 122, § 136c.—*Wilson* v. *Board of Education of School Dist. No. 126 Union,* Madison County, 64 N.E. 2d 380.

An amount earned as employee in industrial plant by one previously transferred from his position as school district superintendent of schools to that of school principal, without notice or hearing, in violation of statute, should be applied in mitigation and reduction of damages awarded him, and judgment therefore should be in amount by which superintendent's salary for period involved exceeds amount earned by him during such period. Ill. Rev. Stat. 1943, c. 122, § 136c.—*Wilson* v. *Board of Education of School Dist. No. 126 Union,* Madison County, 64 N.E. 2d 380.

► Nebraska school districts may not buy homes for their superintendents, with or without the consent of the electorate according to an opinion of the Nebraska Attorney General's office.

The districts have only such authority as is expressly given them by law. The opinion was requested by B. F. Decker, deputy superintendent of public instruction, who said his office previously has allowed the purchase or construction of "teacherages."

Mr. Decker has estimated that approximately 100 consolidated districts already have bought homes for their superintendents. In two districts it was necessary to provide housing for the entire faculty of the schools and the janitor.

Teachers and Administration

MERIT RATING OF TEACHERS

The North Carolina Commission to study a merit system for payment of teachers has recently adopted a series of nine principles for the development of a program evaluation of teachers. According to the state department *Bulletin* the assumptions underlying a plan and the principles to be embodied are as follows:

Assumptions. 1. Training and experience are accepted as two factors which determine merit, and should be considered basic in any salary schedule.

2. Any system of rating, based upon factors other than training and experience, perhaps first would be tried out voluntarily and experimentally by a few local school units.

3. There would be no difference in salary due to sex, race, or type of teaching position (classroom teacher).

Principles. 1. Any system of rating teachers for salary purposes must be anchored in the child and his welfare. Child here means all children, regardless of race, place of birth, or economic status.

2. The actual salary in any schedule must be large enough to attract and to hold the best possible teachers. This means an ample beginning salary, but even more it means a liberal ultimate salary. For the classroom teacher, the ultimate maximum salary on any level of training should be at least twice the beginning salary.

3. All factors or criteria which determine merit should be objective, measurable, and scientific. Otherwise personalities, politics, and other pressures may be determining factors.

4. While the criteria should be objective, they must not be ends in themselves, otherwise teaching may become sterile and mechanized.

5. The factors which determine merit must be those which (1) encourage all teachers to grow professionally while in service, (2) give unity and coherence to the entire teaching force so that there may be co-operation in all teaching efforts rather than professional discord, and (3) cause the teacher to have such devotion to his work that he will give his best efforts to it.

6. Any system of rating teachers should have as an objective only good school personnel. Any other objective would do violence to principle 1.

7. As a means of having only *good* teachers, there should be (1) a high degree of selection of those who may teach, together with the best possible education before one is permitted to enter upon teaching, (2) a probationary period during which the new teacher would be on trial, and would prove his general fitness to continue as a teacher, and (3) a democratic program of in-service teacher education which would be shared by and participated in by all teachers.

8. A good teacher must be defined if there is to be a basis for the use of factors which determine merit.

9. Any system of rating teachers must be acceptable to the organized school personnel, and be judged as fair, just, and workable.

TEACHERS AND ADMINISTRATION

► The Eau Claire, Wis., board of education has adopted a single salary schedule and has voted increases to each of its 187 teachers beginning with the 1946–47 school session. The average increases for the men will be $150 annually and for the women $350. Nonteaching employees have been voted a monthly raise of $15, effective July 1, 1946.

► The Milwaukee board of school directors has voted a two-semester leave of absence without loss of status to veterans who desire to take professional refresher or advanced teaching courses.

► The teacher shortage in Nebraska is growing more serious than at any time during the war, according to a statement of R. D. Moritz, director of educational service for the University of Nebraska. War emergency teachers and other teachers are retiring at a more rapid rate than entries into the profession from the veterans and from the teachers' colleges. The shortage is certain to continue for some years until the college output of trained graduates is increased. Emergency certification and an influx from denominational colleges will make up the shortages.

► The school board of Glencoe, Ill., has put all its teachers on a 12 months' salary basis and has arranged to compensate them for the two summer months at the regular school months pay. The additional cost to the school district will be 20 per cent.

► The school board of Wauwatosa, Wis., has made public three basic policies which will govern the superintendent in returning veterans to the teaching services: (1) Upon request veterans will be assigned to temporary duties by the superintendent and the principals for the remainder of the school year. (2) Teachers who because of training or marital status are not eligible for permanent employment will be notified that the board intends not to re-engage them after this school year. (3) That permanent teachers be engaged by the superintendent to replace temporary teachers who do not plan to finish the school year.

► Arlington County, Va., adjoining the District of Columbia on the south, has had a 25 per cent turnover in its teaching staff since June 15, 1945. Numerous recent resignations have been due to the return of soldier husbands and consequent return to domesticity.

► The Fall River, Mass., school committee has voted to permit deductions semiannually for the Blue Shield co-operative medical service. Similar deductions have been made for some years for the Blue Cross hospital service.

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School Finance and Taxation

DEFENDS BUDGET

The board of education of Stamford, Conn., has fixed the 1946–47 school budget at $1,808,631, an increase of $286,003 over the 1945–46 budget. Most of the raise is due to the equalization of women's and men's salaries, which accounts for $264,000. In explaining the budget Supt. Charles R. Thibadean called attention to the fact that 87.86 per cent of the budget is accounted for by fixed changes over which the board has no control to increase or decrease. The Stamford budget is broken down into fixed and flexible items so that proper consideration can be given to possible decreases or eliminations. Said Mr. Thibadean to the board:

"One practical value derived from such classification is to provide a more graphic presentation of the nature of the various classification accounts for purposes of analysis. They also serve to focus attention on and to explain a fundamental characteristic inherent in school finance. This characteristic being that by the very nature of things school budgets are neither so flexible nor capable of absorbing revenue cuts as generally conceived."

In discussing possible retrenchments Mr. Thibadean added:

"The only defensible retrenchments are those which are made only after considering the various services offered in the light of the policies, the ideals, and the needs. This is another way of saying that since the budget is a translation of policies into the dollars and cents necessary to put them into functional operation, that reduction in these amounts should be made only after the various policies have been modified to the degree which will translate into an amount equal to that of the necessary reduction.

"True economy has been adhered to when all phases of the program are so administered that a dollar's worth of service or material has been made available to the community for every dollar expended. Retrenchment occurs when a reduction is made in the amount of funds to be used for a specific service. It should be kept in mind that there could be no real retrenchment unless more limited funds were to be handled with due regard to economy. Obviously the two terms are not the same thing at all. Not only is there a real difference in meaning, but there is also a fundamental conceptual difference. True economy is a governing principle which should control every administrative transaction; and sound retrenchment is a device or expedient to be used only under extraordinary circumstances.

"It is possible to conceive that real economy might make necessary the expenditure of larger funds to insure that full value would derive from money paid out for various phases of an educational or municipal program. A program which may have been adequate for a period in the past may not be adequate for the present or for the future. Education is not static. It must change to meet changed and changing needs, and if not so changed, it could result in both educational and economic loss. It is possible that if a community loses sight of the educational aims and ideals its support program could become educationally insolvent."

PAY-AS-YOU-GO SCHOOL FINANCING

The El Paso school board has been commended by the *El Paso Herald-Post* for its pay-as-you-go school construction policy. In a recent editorial the editor urged the municipality to adopt the school board's plan:

El Paso school district is an example of a government agency that went on a cash basis for permanent improvements, and found out it works so well that it intends to continue. The city of El Paso and county of El Paso can do the same with profit.

Back in 1938 there was voted a bond issue to build a new Bowie High School. It was the only issue that survived a bitter political fight against the Marvin Harlan Administration.

But for some reason the bonds were not issued, and a year or so later the school board decided to erect the building and pay cash for it.

It was done. The taxpayers got 100 cents for every dollar they spent on the building, none going to interest. There isn't any headache.

If, however, the bond issue had been used, we would have had the same building and today would be paying principal and interest on the bonds. The schools wouldn't have their bill paid until 1960.

The school board has a rather large problem of improvements now planned. It intends to pay for them as they are made. Instead of issuing bonds, building everything at once and paying until 1966, it will proceed more slowly, have everything built by around 1950 or 1952 and have no debt.

This is a little slow because a start on such a program must be made, the old debt must be carried and the school building program was behind. But once the schools have caught up, there will be no difficulty in keeping up and building one of the finest school plants in the country—all for cash.

DEFICIT FINANCING DENOUNCED

Deficit financing as the means of paying increases in the salaries of teachers is condemned by the *Detroit Education News*, organ of the Detroit Teachers' Federation. The teachers hold that the schools and the city will be harassed financially if the board of education appropriates $8,000,000 above the amount which can be raised for the schools within the 15 mill tax limitation. The use of deficits to continue present school outlays and for raising salaries would in the opinion of the teachers cause greater city debts, more interest to pay, and less money available in the future for salaries and other needed school expenses. The teachers have asked consideration of five means of meeting the problem: (1) additional state aid which should readily be possible; (2) federal aid; (3) reorganization of schools and novices to eliminate wasteful overhead, maintenance, and fuel; (4) reduction of services which can be dropped; (5) additional income from such new sources as a higher millage, a city sales tax, or a city income tax.

The teachers have called upon the board of education for leadership to return the schools to a sound financial basis.

LAKEWOOD TO VOTE ON $1,800,000 BOND ISSUE FOR SCHOOLS

The voters of Lakewood, Ohio, will decide in the May primaries whether they approve of a plan advocated by the board of education for a new building for athletics and activities adjoining the senior high school, costing about $900,000 and $900,000 worth of improvements for the other schools in the system. Principal items are a new primary school unit for McKinley School, new gymnasium-assembly buildings for Grant, Garfield, and Franklin schools, and new sanitary and lighting facilities for nearly all of the schools.

T. D. Auble, board president, and Superintendent Paul Remus, said the high school addition will have priority. Lighting and toilet facilities will be next. The total project will take from two to four years to complete, if the voters approve the plan.

The new building at the high school will provide a seating capacity of 2300, sufficient for basketball crowds, pageants, and commencement exercises. It is expected to accommodate community gatherings as well, which will bring in considerable revenue. Included in the new unit will be a mechanical kitchen, where food for 800 people can be prepared, and a small dining room which will seat 100 persons. Tables may be set up in the main part of the building for larger groups.

An allowance of $100,000 for improved lighting facilities has been made, following a period of intensive experiments and investigation.

► **Fort Wayne, Ind. The school board has voted a two cent tax levy for the creation of a school construction fund. A surplus of $38,000 from previous building operations has been set aside for the fund. Supt. M. J. Abbett has recommended that the fund be accumulated to avoid excessive bond issues.**

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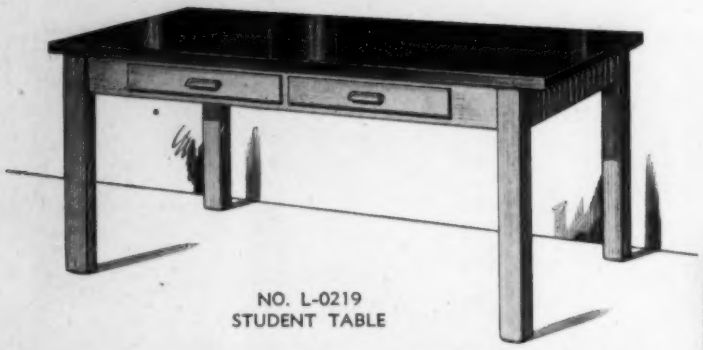

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Teachers' Salaries

SHARP CONTROVERSY OVER TEACHERS' SALARIES IN CLEVELAND

Living costs in Cleveland rose 29.7 per cent from January 1, 1941 to December 31, 1945. Teachers' salaries, according to L. C. Bain, Cleveland school board chief of child accounting and statistics, were adjusted as follows:

Twelve per cent of Cleveland's 3150 teachers received adjustments ranging from 10.3 per cent to 13.9 per cent. And the other 88 per cent received adjustments from 4.2 per cent to 7.5 per cent.

Cleveland maximums compare favorably with those of other cities of like size. The Cleveland top of $3,750, while topped by Chicago's $3,990 (by 6 per cent) is 4 per cent higher than Pittsburgh, 26 per cent higher than Buffalo, 10 per cent higher than Detroit, and 28 per cent higher than Columbus.

Cleveland elementary teachers receive a minimum of $1,640, maximum of $3,030, compared with Pittsburgh's $1,400–$2,900, Chicago's $1,845.75–$2,915.75, and Buffalo's $1,775–$2,575.

Junior high school teachers receive $1,685–$3,390, while Pittsburgh pays its junior high teachers $1,800–$3,400. In the senior high school category Cleveland pays $1,850–$3,750, Pittsburgh $2,000–$3,600, Chicago $2,310–$3,990, and Buffalo $2,175–$2,975.

Cleveland's lowest paid teachers, the elementary group, receive 89 per cent as much as Chicago teachers in that group, 93 per cent of the Buffalo scale, and 88 per cent of the Detroit low of $1,864. Compared to Pittsburgh and Columbus, Cleveland is 17 per cent better off than Pittsburgh in this respect and 15 per cent better than Columbus.

In Detroit and Columbus, the single salary schedule prevails, basing teachers' salaries on training and experience, rather than upon the grades they teach.

Living costs rose 29.3 per cent in Pittsburgh, 26.5 per cent in Chicago, 27.4 per cent in Buffalo, 30 per cent in Detroit. The highest raises in salaries for teachers in these cities were 21 per cent, 26.5 per cent, and 15 per cent respectively, but these percentages apply only to a small percentage of the teachers, many receiving from 0 per cent to 8 per cent.

In Cleveland, a sharp conflict is raging over teachers' salaries.

ALBERT LEA ADOPTS SALARY SCHEDULE

The board of education at Albert Lea, Minn., has adopted a new salary schedule upon recommendation of Superintendent J. J. Halverson, to be effective in September, 1946. The schedule divides teachers into four classes, based on training, and provides annual increases of $50 per year.

Class A teachers include those who have two years' professional training, beyond high school. The beginning salary is $1,500 and the maximum in the eleventh year is $2,000.

Class B teachers are those who have three years' professional training. They begin at $1,600 and rise to $2,150 in the twelfth year.

Class C teachers include those with a bachelor's degree. They begin at $1,800 and rise to $2,500 in the fifteenth year.

Class D teachers have a master's degree and begin at $1,900. The maximum is $2,800 in the nineteenth year of service.

Each teacher's salary has been increased $250 for 1946–47. The teacher has been placed on the new schedule at the point where her salary falls. For example, a two-year graduate receiving $1,500 during 1945–46 will receive $1,750 in 1946–47, and will be placed on the sixth year of the new schedule regardless of previous experience.

Teachers entering the Albert Lea Schools with experience elsewhere will be credited as follows:

First 2 years elsewhere; 2 years Albert Lea
Next 10 years elsewhere; 5 years Albert Lea
Total 12 years elsewhere; 7 years Albert Lea

The rule requiring summer school attendance once in every four years, with a minimum of six credits earned, which has been suspended during the war, was reinstated to take effect in the summer of 1947.

TEACHERS' SALARIES

► The Town Meeting of Athol, Mass., has voted to make permanent a 10 per cent addition to the salaries of all teachers and has voted an additional 10 per cent raise for the current year.

► Lawrence, Mass. The school committee has increased the salaries of all women teachers in the elementary and high school by $500 to $505 in order to put a single salary schedule into effect. The pay of high school instructors has been raised to $3,100; of physical education and industrial arts teachers to $2,700.

► Wausau, Wis. All teachers, secretaries, and janitors in the Wausau public schools will receive a 5 per cent salary increase to meet rising living costs. Janitresses will get a flat $75 a year increase. The increases will become effective in the next school year. Current salary totals of $387,995 will be increased to $407,765 by the board's action.

► All 69 teachers in the Kearney, Neb., schools have been voted an increase of $100 for 1946–47. The city is in the exact geographic center of the United States.

► The Springfield, Mass., school committee has defended its plan of extra salary allowances for men teachers. Since 1941 married men have received a differential of $100 yearly for a dependent wife and $50 for each minor dependent child up to a total of $200 annually. Supporters of the plan point to the fact that the army and navy follow a similar plan.

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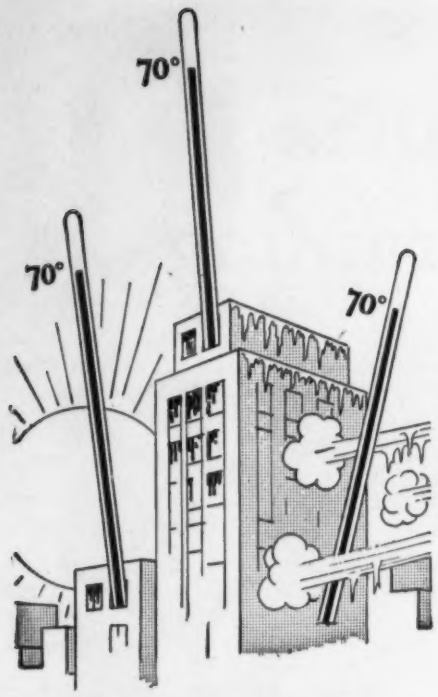

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Personal News

DR. GREGORY SUCCEEDS MR. WRIGHT

Dr. Raymond W. Gregory has been appointed assistant commissioner of education in charge of vocational education in the U. S. Office of Education. He will assume office on July 1 following the retirement of John C. Wright.

Dr. Raymond W. Gregory

Dr. Gregory has been a member of the staff of the vocational division since 1936. During the war he had charge of the food production war training program, under which 200,000 training courses were conducted by local school systems with emergency appropriations through the U. S. Office of Education. This program, conducted in 15,000 rural communities, did much to help farmers break all records for agricultural production. Recently Dr. Gregory has been deputy director of the division of surplus property utilization of the Office.

► Dr. Homer S. Hemenway, for 15 years superintendent of schools at Shorewood (Milwaukee suburb), has resigned.

► Susan M. Dorsey, formerly superintendent of schools at Los Angeles, died in that city on February 5.

► C. Hoglan, superintendent of Cherokee public schools for 10 years, has been elected superintendent of the Marshalltown, Iowa, schools.

► Maurice S. Hammond of Boonville, N. Y., has been elected superintendent of schools at Rutland, Vt., to succeed Wm. C. Fairchild, resigned.

► The Wheaton, Ill., school board has re-elected superintendent K. K. Tibbetts for a two years' term.

► P. F. Shafer has been re-employed as superintendent of schools for Macomb, Ill.

► The Joplin, Mo., board of education meeting last night re-elected Roi S. Wood as superintendent of schools for the 1946–47 school year, at his present salary.

► Supt. Del Danker of Aurora, Neb., has resigned after 18 years of service in the school.

► Dr. James Risley, superintendent of District No. 1 in Pueblo, is retiring after having serviced that district for a quarter of a century. Pueblo for a number of years has had two school districts, No. 20 and No. 1 but after a spirited election held in March, consolidation will be effected this summer with the two joining to become Pueblo District No. 60.

► Arthur F. Hopper has been elected superintendent of schools at Plainfield, N. J., by unanimous vote of the board of education. Mr. Hopper joined the Plainfield school system in 1915 as director of industrial and fine arts, and has been successively, principal of the continuation school, director of educational guidance, principal of the evening school, assistant superintendent of schools and acting superintendent. Mr. Hopper has been director of industrial-arts training at Rutgers University summer school for 25 years, and has been an officer in various vocational and industrial-arts organizations.

Arthur F. Hopper

► E. B. Holden has resigned as superintendent of schools at St. Joseph, Mich.

► Supt. Murry H. Fly of Odessa, Tex., has been re-elected for a three years' term. He is serving his twenty-first year as head of the Ector County Independent School District.

► Supt. E. W. Jackson of Beaumont, Tex., has been re-elected for a term of ten years, and Assistant Supt. Cecil Collins has been given a two-year contract.

► Arthur Carpenter of Swaledale has been appointed regional supervisor for the northeast district of the state of Iowa. He succeeds F. E. Mueller, who has been named superintendent of schools at Dearborn, Mich.

► Supt. B. H. Mead has been re-elected head of the Atkinson, Neb., schools.

► Supt. E. N. Swett of So. Sioux City, Neb., was honored at a dinner tendered on the twenty-fifth anniversary of his election as superintendent of the local schools.

► J. O. Jewis of Fulton, Ky., has assumed the duties of superintendent of schools at Mayfield, Ky., succeeding C. I. Henry, resigned.

► Supt. G. G. Hansen of Stanton, Neb., has been re-elected for a three years' term.

► Supt. Greeley Price of Pierce, Neb., has been unanimously re-elected.

► Supt. J. O. Snowden of Columbia City, Miss., has resigned. He will be succeeded by S. F. Smith, formerly of Houston, Miss.

► Supt. E. E. Parmenter of Shelton, Neb., has been re-elected for a term of three years.

► V. W. Miller, superintendent of schools at Pasadena, Tex., has been given a new three-year contract with a substantial raise in salary provided for each year. Robert W. Coffman, assistant superintendent in charge of business affairs, also has been awarded a three-year contract with a corresponding raise in salary for each of the three years.

► After 26 years of service, F. E. Patrick has resigned as superintendent of schools at Bethany, Mo.

► Supt. H. B. Allman of Muncie, Ind., has been elected professor of education and director of the summer school in the School of Education, Indiana University. Dr. Allman has been head of the Muncie schools since 1936 and was only recently unanimously re-elected for a three year term. Among the services for which the school board has expressed its appreciation, Dr. Allman established the Muncie Trade School and erected a wide program of trade training for the local war industries.

► Roscoe D. Shaffer, principal of Central High School since 1937, was named superintendent of Muncie, Ind., schools. He succeeds Dr. H. B. Allman.

► George F. Carroll, superintendent of Terre Haute, Ind., schools since 1927, has resigned. Wayne F. Watson has been appointed acting superintendent. Mr. Carroll has been employed by a Terre Haute bank.

PERSONAL NEWS OF SCHOOL OFFICIALS

► Dr. Roy A. Hinderman has been appointed assistant superintendent in charge of secondary and adult education in the Denver Public Schools, to succeed the late John J. Cory. At the time of his promotion, Dr. Hinderman was director of instruction and research. He came to Denver in 1936.

A graduate of the University of Minnesota with a B.S. degree, Dr. Hinderman received his M.S. and Ph.D. degrees in the field of school administration from the University of Wisconsin.

► Three former Calumet City, Ill., high school board members who resigned from their posts to enter the armed forces were honored recently at a dinner given by the Thornton Fractional High School board of education (Calumet City) on their return to civilian life. The three ex-board members are Lieutenant Colonel George Hittle, Major James F. Kelly, and Chief Warrant Officer Walter Dempsey, all of whom served in the Pacific theater of World War II. The three men served a total of 14 years on the Chicago suburb school board; Mr. Kelly was president of the board for three years. The present members of the five man Calumet City high school board are Pete Gindl, Ed Kuhlman, Joseph Preissig, Albert W. Wahlgren, president, and Andrew F. Klein, secretary. A. V. Lockhart is superintendent of the Calumet City high school which has 1300 students.

► Dr. G. W. Larimer of Salida, Colo., who holds one of the longest records of continuous school board service in the Rocky Mountain region, has retired from active duty with the Denver and Rio Grande Railroad hospital here after having been on their staff for 38 years.

Dr. Larimer came to Salida in 1908 and became a member of the school board in 1914 having now served 32 consecutive years. He was named board president in 1922 and has been serving in that capacity annually since that time.

Dr. Larimer expects to continue with his school board work after retirement from the hospital.

► After seven and one half years as chancellor of the University of Nebraska, Dr. C. S. Boucher has resigned, effective September 1, 1946. Ill health is the reason for this action.

► Lemuel Pitts, principal of Central High School in Pueblo, Colo., for 20 years and a member of the staff of the school for 39 years, has announced his retirement at the close of this school year. Central High is one of the largest high schools in Colorado.

► With the re-election, after nomination on both major parties, of William H. Nell and Walter B. Lang, the Steelton, Pa., board of education further extended its record for continuity of service. Mr. Nell came on the board in 1912, serving as secretary. He has served continuously in the capacity of member secretary since that time. Mr. Lang, the "baby" member of the board, has served continuously since 1929. Both were re-elected for a six-year term.

► Supt. Geo. W. Hanna of Valley City, N. Dak., has resigned after nearly 47 years of service.

► George Gentry, formerly of Temple, Tex., has assumed the superintendency at Goose Creek, Tex., to succeed N. S. Holland. Mr. Gentry has completed all but one semester's work toward the doctorate in education.

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School Board News

SCHOOL BOARD POLICY ON EDUCATIONAL ADVISORY COMMITTEES

The board of education at Kalamazoo, Mich., has adopted a series of ten statements outlining its policies regarding the function of committees appointed by the school administration to consider special educational problems. The statement was prepared by Superintendent Loy Norrix.

1. Public education is a function of the state. For purposes of better administration the state wisely delegates or shares this function with the local communities, through the boards of education, with certain reservations.

2. The development and operation of an adequate program of public education within a city of this size is a responsibility so great and important that it requires and challenges the combined efforts of the best minds of the community — the board of education, the school staff, educational experts, and school patrons.

3. In order that schools may attain the goal of educating children and youth, they should themselves demonstrate the best practices and reflect the co-operative spirit of democracy.

4. It is a strength of democracy that it can delegate authority and place responsibility. Participants share both the authority and the responsibility.

5. It has long been the policy of the Kalamazoo board of education to consider the superintendent of schools the executive official who represents the board in the interpretation and administration of its policies to members of the staff. Conversely, he has the responsibility of representing both individual employees and the entire staff before the board of education, interpreting their views and requests, and making recommendation for appropriate action.

6. In the formulation of recommendations of programs and policies, the superintendent is authorized to appoint to committees the persons best qualified to serve — from the staff, the board of education, or the patrons. Sometimes joint committees may be appointed to represent the staff, the board and/or the public.

7. The superintendent works closely with these committees, interpreting the policies and viewpoints of the board, counseling and advising with a committee throughout its study and deliberations, and keeping the board informed of its progress. Its recommendations are the result of research, group thinking and study, compromise, sound principle and realistic facing of fact; and is considered by the committee to be the best report that can be made under the circumstances.

8. It is the responsibility of the superintendent to present reports and recommendations of such committees to the board of education with his own recommendation for the proper action to be taken, with the reasons therefor. When necessary, he must defend his recommendation.

9. However, the board of education, understanding and appreciating this responsibility of the superintendent and endorsing democratic practice, the "meeting of minds" within committees for the evolution of recommendations, gives encouragement to the use of committees in this work, and gives assurance that the recommendations will receive as favorable consideration as circumstances permit.

10. Final responsibility for all decisions in the adoption of all policies rests with the board of education. The function of policy forming is delegated to the board of education by the state and by the local public, and may not be delegated by the board to any agency.

SCHOOL BOARD NEWS

► The school committee of Springfield, Mass., has objected to the demand of Mayor Daniel B. Brunton that he be recognized as the legal chairman of the committee. Attorneys employed by a majority of the members have rendered an opinion that a state law passed in 1936 replaced the law of 1883 under which the mayor automatically became presiding officer, and made him a mere committee member.

► During the month of February Nebraska vocational schools received army surplus tools and supplies valued at $250,000. To insure equitable distribution the articles were shipped to the state department of education at Lincoln, and placed on display for examination by representatives of local school districts. The shipment included electrical and laboratory appliances, cutting tools for wood- and metalwork. Vocational schools received the materials at the cost of shipping and packing.

► Cleveland, Ohio. Superior School in Cleveland Heights is the only school in Cuyhoga County, Ohio, which teaches retarded children exclusively. Forty of the boys from this school were accepted for the armed forces during the war and many of the girls have gone into useful jobs for the government and for private industry.

These pupils were turned over to the school as "noneducable" by authorities from other schools, and from custodial agencies. Mrs. Thelma Cobbledick is acting principal, and directs the work of teaching these backward children group living and useful occupations.

Girls keep house in their own building, when they reach the age of 12, doing the marketing, cooking, cleaning, and decorating. The boys enter shop classes at that age.

► Parma, Ohio. The Parma-Schaaf High School held, on February 20, a forum on the problem "Which Way to Unity?" The speakers included a Negro judge, a Protestant minister, a Catholic judge, and a rabbi.

Beyond Their Line of Duty—The Story of T.V.S.O.

*Mark Price**

On a Thursday afternoon in the fall of 1944, the school department of a New York newspaper had a visitor — a young sailor flying the distress signal. His tale of woe was brief and to the point.

Eighteen members of his unit (himself included) had been summoned suddenly to take the examination for admission to specialists' school — and the test was to be given on the following Monday! What made it tough on these lads was the fact that most of them had not even a high school education, and now they were confronted with the task of making good in what was certain to be a stiff exam or face the ridicule of their buddies. Could the school editor help them get some coaching during the time remaining before their own D Day?

"Ever hear of TVSO?" the sailor was asked. He shook his head. "Then this is a good time to get acquainted," he was told. The editor reached for a telephone — and immediately the machinery of TVSO was put into operation.

Within the hour, Samuel S. Berkowitz, chairman of Instructional Activities in the Teachers Voluntary Service Organization, was making contacts with teachers of English, mathematics, physics, and other test subjects. He talked to the commanding officer of the station to which the boys were assigned and arranged for them to have extra time off. Between calls, teaching programs were set up to cover the needs of the group.

On Friday afternoon, the boys attended their first TVSO class. All of Saturday and Sunday was given over for their instruction. On Monday they took the test and passed with relatively high marks.

More recently, at Halloran General Hospital in Staten Island, 34 TVSO teachers faced an audience of a thousand battle-scarred patients to receive the homage of the army for having devoted their entire summer vacation to the operation of a summer school for the wounded.

As each teacher stood to receive the citation, the assembly hall echoed to the cheers and the applause of the patients. The recipients must have blushed when the commanding officer of the hospital, Brigadier General Ralph G. DeVoe, said: "This voluntary instruction given by New York City teachers is a splendid example of how the public feels about helping to prepare servicemen for civilian life."

A LONG LIST OF SERVICES

The incidents described here are but two in a long line of meritorious achievements which have made the Teachers Voluntary Service Organization one of the most vital and useful service groups operating in the New York City area during the war years. Inaugurated by a handful of principals and teachers in the summer of 1942, TVSO developed in the span of three years into an organization that was to be known all over America and on all the fighting fronts for its educational, recreational, and social services in behalf of the men and women of the armed forces.

From one school and canteen, it expanded into an organization of five fully equipped borough centers supported by 25,000 present and retired teachers and supervisors who willingly contributed their time and money to the project.

For the 6500 persons who actively participated, the TVSO program was no easy task. Only half the number could be employed in the instruction activity, to conduct classes in the borough centers as well as in hospitals, camps, bases, and other service installations in the metropolitan area. The remainder operated the canteens and recreation rooms, arranged parties and celebrations (even weddings!), they visited the sick and the wounded, kept in frequent communication with the men and women who visited the centers as well as their families, and even helped to find apartments for those stationed in New York. One special group prepared and distributed a bi-monthly news bulletin which was sent to the 1500 New York school employees in the armed forces and the merchant marine. It was a program that kept these volunteer workers on the job from midmorning until late at night — and never was there as much as a single complaint.

This may explain why the New York *Times*, in an editorial published on February 12, 1944, described TVSO as "a unique organization, and one worthy of commendation," and added: "The teachers of this community can be proud of their record. They have served far beyond their line of duty."

Vast Numbers Assisted

Between the opening of the first borough center in 1942 and V-J Day in 1945, TVSO entertained a total of 450,000 visitors, young men and women from every state, from Alaska and the Philippines, from Russia, England, France, China, and the rest of the allied nations.

Of this number, 42,000 took advantage of

*New York City board of education.

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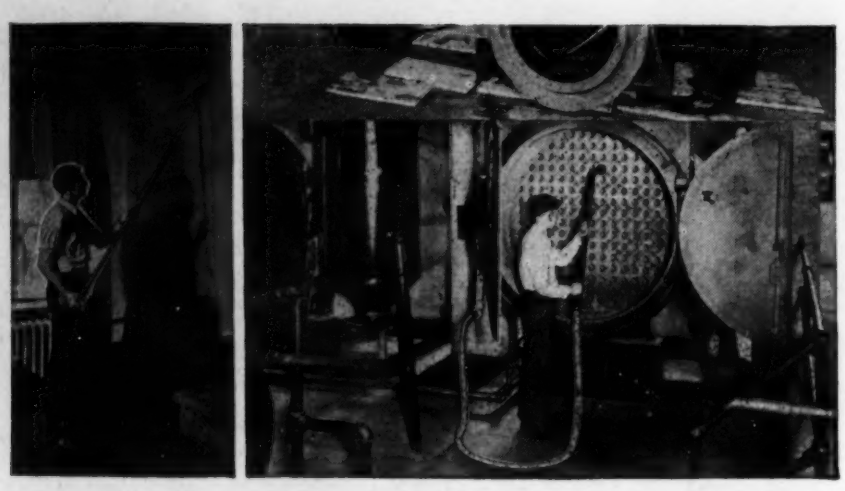

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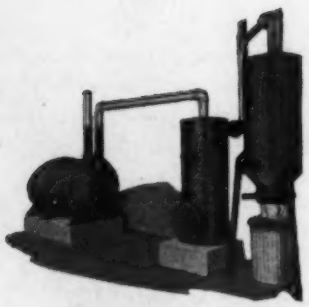

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TVSO's educational program to the extent of 215,000 hours of instruction. "Any subject — any time — any place" was the TVSO credo, and the teachers never wavered. Whatever the subject requirement, the instruction chairman would always produce a qualified teacher ready to accept the assignment.

The subjects were on different levels and covered a wide area, but it was Spanish, mathematics, and stenography which attracted the most students. The interest of the others centered around arts and crafts, typewriting, French, English, radio theory and code, music, German, navigation, Russian, bookkeeping, chemistry, Italian, dancing, Portuguese, Japanese, drawing, spelling, reading, story writing, history, economic geography, mechanical drawing, blueprint reading, drafting, silk-screen work, meteorology, engineering, photography, psychology, and accounting.

One Teacher's Idea

The idea of a teachers' unit for war service on the home front had its beginning in the summer of 1942, when the board of education released teachers from their obligation to be available for possible war emergency assignments during the recess period. To Mrs. Martha R. Finkler, assistant to principal in charge at Public School 30, Brooklyn, the announcement was especially heartening.

Ever since Pearl Harbor, she had cherished the hope that a way would be found to organize the professional staff for war work. She felt that, instead of dissipating their efforts by joining the several war groups then in existence, the teachers might utilize their abilities and training more effectively in a unit of their own, and establish themselves publicly in a service directly associated with the war effort. Mrs. Finkler broached the subject to friends in the school system and found them enthusiastic over the plan. Then and there the Teachers Voluntary Service Organization was formed, with Mrs. Finkler as the executive director.

Consultation with the agencies comprising the United Service Organizations (USO) produced phases of activity for which teachers were trained, not the least of which was instruction for men and women of the armed forces. Scores of additional teachers were recruited for TVSO service, and then, on November 17, 1942, through the co-operation of the Bowery Savings Bank, the first TVSO center was opened at 191 Joralemon Street, Brooklyn.

By the beginning of 1943, the Brooklyn program became so large that a second center was deemed necessary. The Queens area was chosen by reason of the fact that a large number of visitors to the Brooklyn center came from Queens and Long Island. The Queensborough Teachers Association threw its support to the movement, and on April 5, 1943, the Queens center was established.

The Staten Island center at 26 Richmond Terrace was opened on November 3, 1943, to be followed in the following month — Pearl Harbor Day to be exact — by the Bronx center at 2534 Marion Avenue. On January 1, 1944, the Manhattan center was opened at 93 Park Avenue.

Complete City Coverage

In the link-up of New York City through its five borough centers, TVSO enjoyed the full support of public and private agencies. The board of education loaned the organization a vast amount of equipment including typewriters, furniture, and textbooks.

With the centers flourishing full time, the board of governors began to turn its attention to another group of service people who wanted to enjoy the facilities of TVSO but couldn't come to the centers. These were the convalescent veterans in the hospitals who wanted instruction.

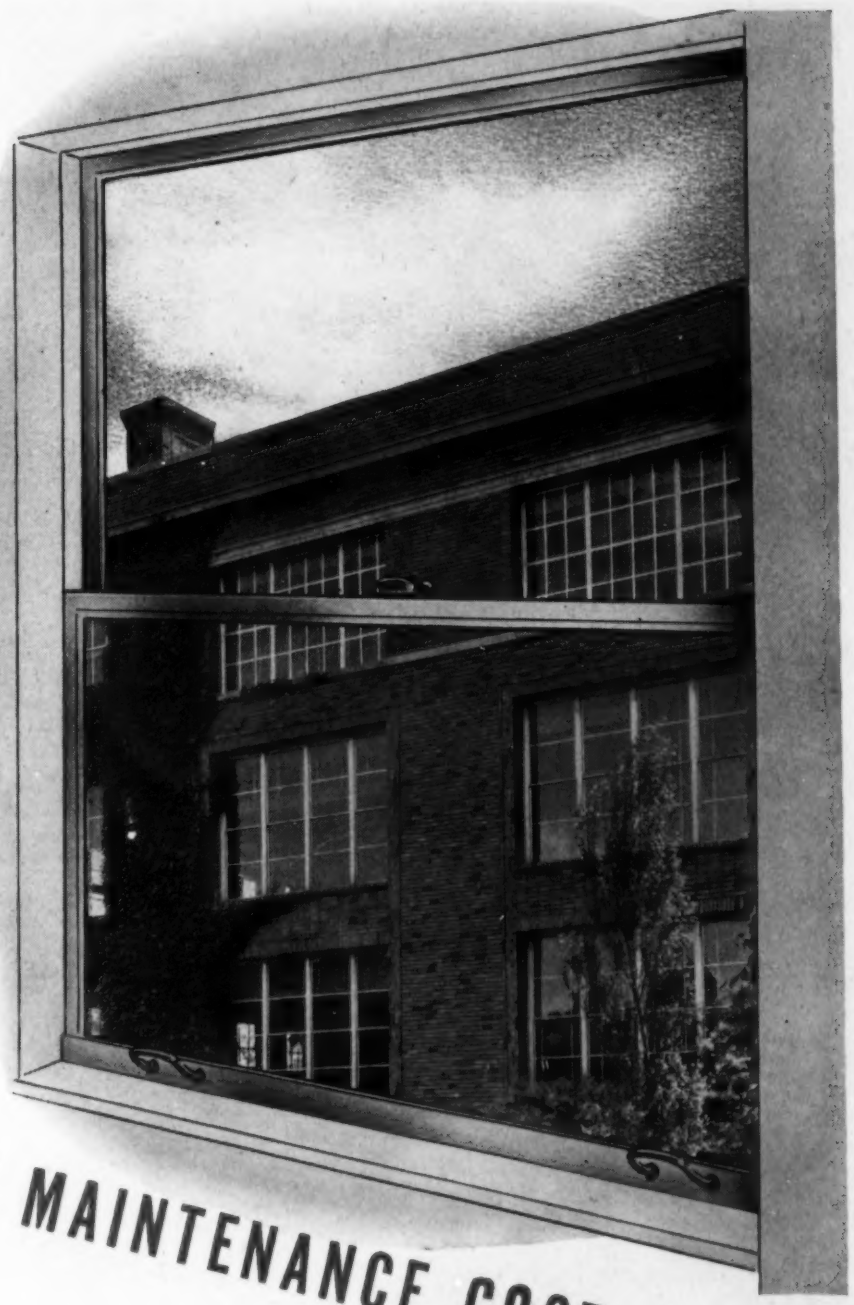
Arrangements promptly were made to bring TVSO to Halloran, St. Albans, Bronx Area, and other hospitals in the New York region, while the army and navy co-operated in assigning the school periods and providing transportation for the teachers. Individual instruction was provided for bed patients, while ambulatory patients were taught in small groups. In the summer program at Halloran in 1945, 93 patients were awarded TVSO certificates of completion, including ten who were enabled to take the Regents examinations.

Another new activity was "The Listening Post," set up in Manhattan to advise servicemen and women soon to be discharged, on postwar opportunities. Hundreds of persons availed themselves of this service, and its usefulness was demonstrated by the cheering letters which came from "back home" from men who returned to high school and college or set up small businesses.

In September, 1945, shortly after V-E Day, the board of governors authorized the closing of the borough centers. Manhattan, Bronx, Brooklyn, and Queens closed their doors on October 1, while Staten Island will continue at the suggestion of the navy.

Although peace has made it possible to abandon the borough centers, the board of governors was firm in its resolve to continue its work in behalf of the wounded in the hospitals.

Thus, TVSO continues to function. Classes are meeting daily at Halloran, and a new program is expected to be set up shortly at St. Albans, and wherever else it is needed. From its new quarters in the board of education building, Brooklyn, TVSO is ready to give the same service in peacetime that it performed during the war years. Nearly all of the teachers have expressed a desire to continue until the last of the wounded are released. It will mean long trips by train and ferry, and it will consume a great deal of time after school hours, but these teachers won't mind. That's the way TVSO does things.



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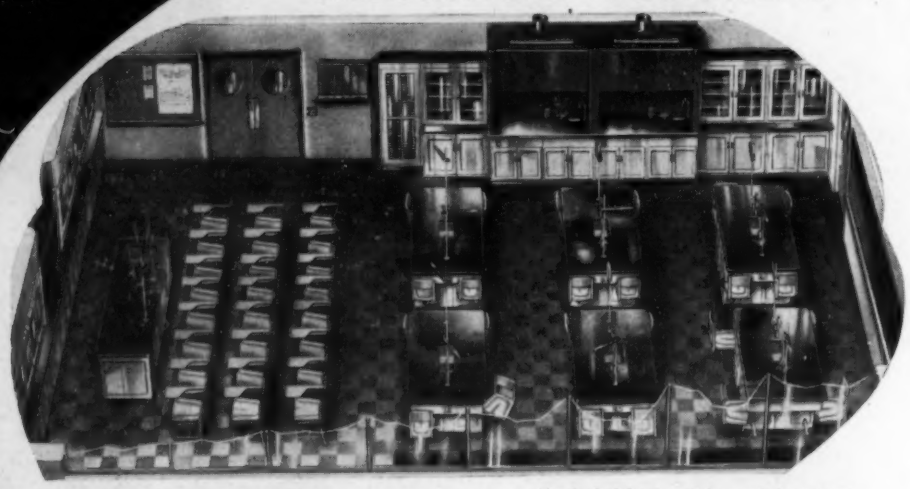

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ROCKY RIVER BOARD BUYS LAND

Voters of Rocky River, Ohio, have backed the $960,000 bond issue proposed by the board of education by an 8 to 1 vote in the November election, and the board offered the bonds for sale March 14. Attractive offers at a premium have been received.

The board recently purchased another 4¼ acres to add to the 17-acre site already acquired.

Superintendent John J. Young announced that an outline plan for the new building has been completed, but complete plans are not yet ready for submission to the board for final approval.

CORONA VOTES BONDS

The voters of Corona, Calif., have voted $775,000 in bonds to be used in the erection of additions to four grade schools, a complete new building, a junior high school, and permanent school equipment. Superintendent of schools states that the campaign was led by the Corona-Norco Parent Teacher Association, supplemented by a Corona "Committee for Yes" on the School Board Issue, consisting of key members of various groups in the city. A total of 442 columns of space was obtained in the local newspaper, and a merchant paid for a large advertisement on the election eve.

CLINTON TO DELAY BUILDING PROGRAM

The school board of Clinton, Iowa, has issued a statement that it will not enter upon its school building program without due consideration for economy. In a public statement to the local press the board wrote:

"The board does not contemplate entering into the actual construction of any of the proposed buildings until such time as it believes that building costs are sufficiently stabilized as to permit buildings to be constructed at reasonable costs. The best information that we now are able to obtain indicates that it will probably be about a year before a stabilized level of postwar building costs will be reached, but that when this level is established, it may be expected to remain relatively constant for a period of several years.

"Like all prices, postwar building costs will be higher than prewar costs, but they are expected to become stabilized at levels bearing a reasonable relationship to general price levels. When that point is reached, the board proposes to begin the construction program unless shortages of skilled labor and building materials make further delay advisable. When actual construction is started, it is expected that construction will be spread over a period of two or three years rather than trying to build all of the proposed buildings in one year. In short, the board does not propose to rush foolhardily into an immediate construction program, but proposes to use the same common sense that the businessman would use in his own business."

The bond issue program will be pushed immediately in order to take advantage of the present low interest rates.

BUILDING NEWS

► Supt. Murry H. Fly of Ector County, Tex., has reported that the County Independent School District, which includes the city of Odessa, has under way a school building bond issue of $1,085,000. A high school building to cost $550,000, an elementary building, a $40,000 cafeteria, and three additions to buildings are under construction. All schools will have auditoriums and cafeterias. Haynes and Strangs, architects, Lubbock, Tex., are in charge of the work.

► A survey of the Port Huron, Mich., school plant has disclosed the necessity for early replacement of six elementary school buildings and of the high school because of fire hazards and lack of adaptability to modern educational needs. Dr. A. B. Moehlman of the University of Michigan has also recommended the replacement, within a period of ten years, of four grade buildings. Three more recent buildings and additions to two old structures are worthy of permanent retention in the opinion of Mr. Murray. The entire plant is rated as "poor" from the standpoint of quality and extent of instructional facilities and safety of pupils and teachers.

► York, Pa. During the past two years, the West York Borough School District has purchased numerous lots for an athletic and recreational field. At the present time approximately ten acres are available for an athletic project.

As soon as building conditions permit and materials are available, the school board intends to grade and landscape the entire plot to include a football field, baseball diamond, tennis courts, track, grandstand, and bleachers. The plan is to enclose the site with an iron fence approximately eight feet high and surround it with shrubbery. This setup will allow a full program of athletics for the high school and a convenient playground for the community. Supt A. H. Martin states that it is probable that five years will elapse until everything is completed.

► The Jasper City, Ala., board of education has drawn up plans for school buildings to be erected as soon as labor and materials are available. Supt. G. T. Patrick reports that the plans call for a new Junior High School building and a gymnasium-auditorium to be erected at the Senior High School. Eight additional classrooms at the Central Elementary School and an auditorium and additional classrooms to the West Jasper School. In addition a modern lunchroom will be erected at the Junior High School and the Central Elementary School. The total estimated cost will be about $225,000.

THIS WORTH WHILE ACTIVITY FOR YOUTH

..has full support of every Community

Every city, large or small, wants to point with pride to its school system...for its educational rating, for its athletic team standings, and for its school and city representative—the band or orchestra! Parents and other taxpayers appreciate and want strong representation of their schools and communities in district, state and national band and orchestra contests and festivals...They want a good school band and orchestra for civic functions and parades. The youth of your school system want the opportunities of individual and group participation and training which the band and orchestra provide!

A good school music program helps put your school system and community "on the map." It gives you recognition, and helps get good will and community support for your school system... and it's a worth while activity which can be enjoyed by *both* boys and girls!

For help in organizing or developing your school music program, write us direct or call upon your friendly Conn dealer. Our knowledge and experience are at your disposal without obligation. 1928

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Confidentially

the Costello "Double Sewed" Eraser does wear out

Many the time we have walked into a classroom to find Costello's that were still doing an efficient erasing job, even though the erasing felts had worn almost to the backing.

So, in spite of their *springy wool felts, their reinforced back, their exclusive "double sewed" construction* — the Costello double Sewed Erasers actually can be worn out. Takes a long, long time to do it, though.

Yes, actual classroom use corroborates our laboratory tests: The Costello "Double Sewed" Eraser outwears any other eraser; will outwear some erasers two to one.

This photograph has been retouched to show the ten separate sewings which make this the only "double sewed" eraser . . . one reason for the Costello's long and efficient life. No other eraser employs anywhere near this amount of sewing.

Weber Costello Company

Manufacturers Dept. AMS-46

Chicago Heights, Illinois

EDUCATIONAL ORGANIZATION

(Concluded from page 58)

slight responsibilities for education. The *challenge* is to solve the problems of education which under modern conditions cannot be solved without more effective service at the state level. We may conclude that the states need not reclaim any educational powers delegated to local districts, or violate local educational autonomy, in order to increase their contributions to the children in the schools.

In accord with these principles, we may draw some conclusions about what the attitudes of local, state, and federal schoolmen ought to be. The local administrator should know which of the educational impacts of the state are appropriate and which are not. After minimum standards required by law have been met, he should balance increased educational efficiency against loss of educational democracy in deciding which additional state programs should be placed in effect in his community.

Once the legal minimums which it must enforce have been met, the state department should approach the local units entirely on a service basis. It should not violate this principle by attaching conditions to state funds not necessary for prudential reporting as required by law. It should leave leeway for local choices of state programs. It should formulate the state programs co-operatively with local school authorities. It should represent the interests of effective local professional and lay leadership in dealing with other state agencies, private groups, and the Federal Government.

State Leadership Influences

The state department has a responsibility for leadership when the programs of other state agencies involve organized education. To illustrate, it should influence the State Motor Vehicle Department on driver education, the State Health Department on matters of school health, and the State Aviation Commission on aviation education. It should exert these influences through the strength of its leadership and not through attempted legal or budgetary restrictions against those activities of the other departments of the state government which may affect education.

As the states should operate on a service relationship with the localities, so the Federal Government should operate on a service basis in relation to the states. It should make available to the states a choice of non-compulsory programs. These programs should be co-operatively developed by state and national leadership, and the states should be free to accept or reject them without suffering financial losses either way. When the federal aid involves money or materials, the federal interest in how they are used should be confined to the bare accounting procedures necessary to keep the federal books straight. When the aid directly involves educational programs, there should be care not to undermine, but rather to strengthen state and local responsibility for such programs.

One of the most important federal functions in education is to harmonize the activities of the Federal Government which affect the schools and colleges. This cannot be accomplished through frontal attacks on the huge executive departments in Washington. The Federal Government should trust the states to choose among educational programs from any source, just as the states should similarly trust the local school units to choose among programs from the state level. Experience has demonstrated that all the federal programs which come to state departments cannot be "channeled" through a single agency. The theory that they can is attractive, but the conditions do not permit it. Programs from any branch of the Federal Government should be made educationally acceptable before they are placed in effect. The work can best be done in Washington.

Several methods of co-ordinating federal educational activities have been suggested. Among these are a national department with cabinet status, a national board of education, and interdepartmental committees at various levels of the official hierarchy in Washington. Members of our profession and other citizens who realize how important this problem is should give it still further attention, reach a consensus as soon as possible concerning what should be done, and then move to place the recommendations in effect.

We can probably improve most phases of local-state-federal educational relationships without additional statutory authority. Perhaps we should re-examine our organization and practices under our present authority. Do our practices indicate we really believe in the service concept? Do our practices indicate we are really willing to trust others with authority and depend on leadership to influence them in the direction we believe they should go? Do we really believe in educational democracy? We have an excellent opportunity here to discuss these and other questions of local-state-federal educational relationships.

DEAN SMITH RETIRES

The announced retirement of Dean H. L. Smith of the School of Education, Indiana University, removes from active service an educator whose influence has extended far beyond his native state and into many fields in addition to his specific task of teacher training. School administrators, and particularly those engaged in school building projects and in the selection of textbooks, owe Dr. Smith a vast debt of gratitude for his constructive studies in these fields.

SCHOOL ARCHITECTS MOVE OFFICES

Perkins & Will, architects and engineers, have leased the entire twenty-second floor of the Jackson-Franklin Building, 309 West Jackson Boulevard, Chicago 6, Ill.

The firm, formerly Perkins, Wheeler & Will, now occupies offices in the Merchandise Mart.

Functional planning of the Crow Island School, Winnetka, Ill., and the Rugen School, Glenview, Ill., gave the architects national recognition as school specialists. Currently they have more than 40 school building projects "on the boards" for clients from New York to Arizona.

Their present general practice includes several large veterans' housing projects and a variety of construction in the office building, industrial laboratory, amusement, resort-hotel, hospital, and club fields.

SCHOOL BONDS

During the month of February school bond sales in the amount of $17,326,100 were reported. The average price of twenty large issues at the end of the month was 1.29 per cent. The largest issues were California, $2,530,000; Louisiana, $6,452,000; Ohio, $1,802,000; Texas, $5,115,000.

SCHOOL BUILDING CONSTRUCTION

During the month of January, 1946, Dodge reported contracts let in 37 eastern states for 99 educational buildings at a valuation of $18,062,000.

Reo Introduces

AN ENTIRELY NEW IDEA IN SCHOOL BUSES

A complete, unit-engineered chassis and body—a de luxe vehicle at a standard set price

An entirely new conception of school bus manufacturing responsibility and service is presented by the new Reo Safety School Bus. It simplifies the selection and purchase of pupil transportation equipment. It provides safe, comfortable, dependable transportation for the nation's school children that meets or exceeds every requirement of all the states.

Engineered from wheels to roof as one unit, the Reo Safety School Bus is a complete de luxe vehicle at a standard set price. Developed by one of the country's oldest and most experienced manufacturers of school bus chassis, buses and trucks, it sets a new standard of value—fixes responsibility for upkeep in one source, Reo—assures low cost per pupil mile and complete satisfaction over a long period of years.

For details and prices on the wide range of capacities now being built, or for a demonstration, write School Bus Division, REO MOTORS, INC., Lansing 20, Mich.

FOR SAFETY AND ECONOMY STANDARDIZE ON

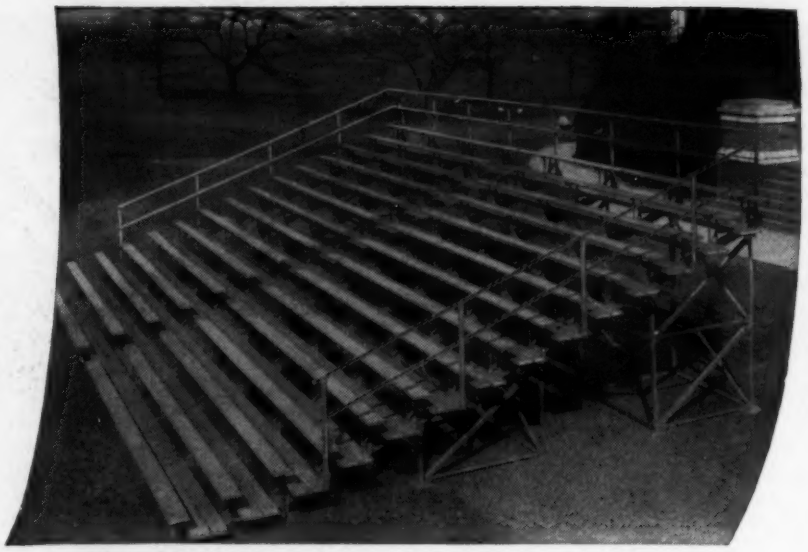
REO SAFETY SCHOOL BUS

CONFORMS TO ALL STANDARDS OF NATIONAL EDUCATION ASSOCIATION

But when will Wayne Grandstands be available?

• "Look!" we can almost hear you saying, "for months you've been telling us about Wayne Grandstands. That's fine! But how about less etceteras and some Wayne equipment. *The answer:* Lumber is scarce and so is steel. These materials are the bottleneck. But despite such handicaps we are filling orders on a "first in, first out" basis and expect deliveries to improve.

When you do get Wayne Grandstands your own experience will confirm what we've been telling you —they have steel's strength and safety, are comfortable and provide maximum visibility. They are designed and built to meet your specific conditions and are available in every style suitable for outdoor and indoor use. For maximum economy, several standardized types have been developed. Now is the time to place an order and arrange for delivery.



WAYNE TYPE "G" STADIUM PORTABLE—spacing of seats and width of foot rests same as in general stadium construction, allowing ample room for passage of late comers. Can be built up to 50 rows, without foundations or use of tools. Number of rows, as well as length, may be increased.

Wayne Iron Works, 444 No. Pembroke Ave., Wayne, Pa.
Gentlemen: Please send us your new "Grandstand IDEA Book."

MY NAME_____
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"Wayne Stands for Safety"

FOLDING & ROLLING GYMSTANDS* • PORTABLE GRANDSTANDS • PERMANENT STADIUMS

*REG. U. S. PAT. OFF.

Washington News

ISSUE ANALYSIS OF BILL

The Office of Education has made available an analysis of the principal features of H.R. 4499 and S1719 which contemplate federal subsidies of $1,545,000,000 for a seven-year program of acquisition, construction, and improvement of public school plan facilities. No hearings have as yet been held on the bills.

UNESCO REPRESENTATIVE

An employee of the State Department, Dr. Esther C. Brunauer, has been appointed as the American representative on the Preparatory Commission of UNESCO and member of its executive committee. She will represent the United States with the rank of minister.

NATIONAL SCHOOL LUNCH LEGISLATION

At the time of writing, March 11, the conferees on the permanent school lunch legislation had not come to an agreement. It is predicted that the appropriation of $15,000,000 for equipping lunchrooms and for nutrition instruction will be eliminated.

SCHOOL BUILDING AID

Congress has before it two bills to provide federal aid for school building construction. Neither bill has had a hearing, and there is no likelihood that such hearings will be held in the immediate future.

The bill favored by the U. S. Office of Education is the Morse-Neely bill, HR4499 and S1719. This bill would provide direct aid in the amount of $150,000,000 during a period of seven years and would make additional appropriations for planning and supervision. The school construction would be channeled through the U. S. Office of Education and the state departments of public education.

The second bill, S1123, is a part of the public works program for unemployment relief and was introduced by Senator Thomas of Oklahoma. The latter bill would place the entire control in the Public Works Administration, and would ignore the Office of Education, as well as, the state departments.

SURPLUS PROPERTY FREE?

The National Council of Chief State School Executives has requested President Truman to take action making surplus war materials available to eligible schools and colleges at token cost not exceeding handling and care. The plea asks that the materials be made available in small enough amounts that will make purchases by schools feasible. The Council has made a further plea for more liberal allowances on veteran education.

After the Meeting

One After Another

"Oh, what a time we had! I just don't know how I ever came through! First I got angina pectoris, and then pneumonia, followed by arterio sclerosis and phthisis, after which they gave me hypodermics. Then I had barely recovered from these when I got tuberculosis, with appendicitis, followed by tonsillectomy. Yes, indeed, it was the hardest spelling test I've ever had." — *Brantford Expositor.*

No Contest

In the little Scottish schoolroom, Sandy and Donald fell into a heated argument over the comparative merits of their respective birthplaces.

"Laddies," interrupted the schoolmaster, "ye'll have to stay in after school, and as a punishment for disturbing the class ye'll have to write the name of your birthplace five hundred times."

When the class had been dismissed, the two boys set about their irksome task, while the teacher repaired to the schoolyard for a breath of fresh air. Soon they were embroiled in a new controversy. Hurrying in, the teacher demanded an explanation.

"This punishment ain't fair," protested Sandy. "Donald'll get done long before me; he was born in Ayr, and I was born in Auchtermuchty!"

Mathematics as Used

A professor from a midwest university in speaking of the poor reading record of certain communities made this statement:

"In Community A, where 166 pupils or 17 per cent of the total enrollment were found below expectancy on the Progressive Achievement Test, 109 were boys and 57 were girls. This meant that 11 per cent of all boys and 6 per cent of all girls were below par."

The professor evidently did not get his Ph.D. in mathematics, for according to his statement, there were 976 pupils, of which *991* were boys and *950* were girls. Perhaps we ought to start at the top and find out where the trouble is.

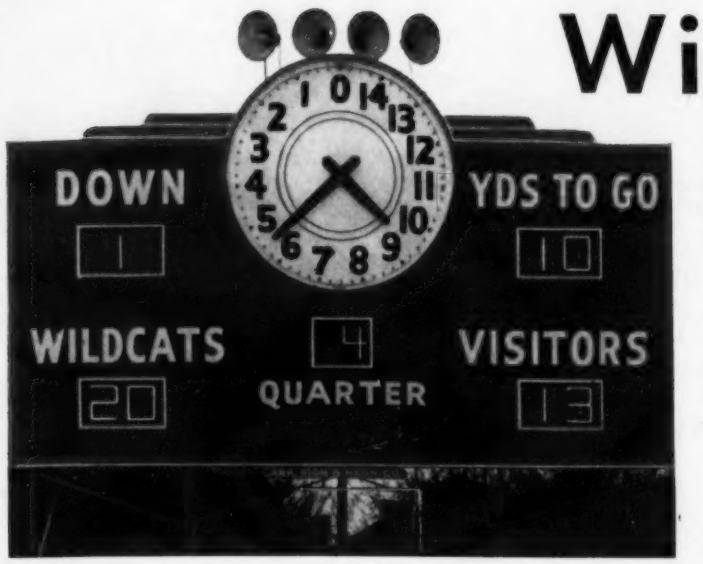
Wrong Team

"Are we going to try out young Roberts for the football squad?" asked the captain.

"No," replied the coach; "anybody who can spell such words as plenipotentiary, erysipelas, and plebiscite is no good as a football player." — *Mississippi Educational Advance.*

CAN YOU TAKE IT?

"From the adolescent no teacher should expect gratitude . . . the more accomplished her work is, the less will her pupils realize that she does anything of great moment to them; the more will they feel sure that their growing life and vigorous activity are the main factors in the process. The true teacher recognizes this very unconsciousness as of the essence of her success and takes more joy in it than in a thousand thanks." — *Fanny Street,* in "The Faith of a Teacher."

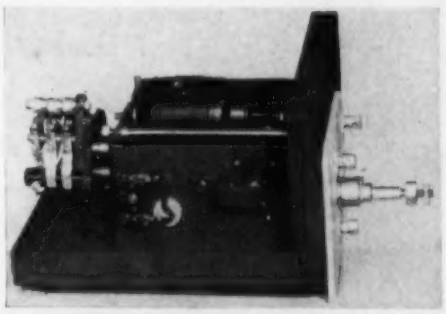


Win or Lose— it's YOUR GAIN

WATCH GAME RECEIPTS SOAR with a NATIONAL FOOTBALL SCOREBOARD

"The Eyes and Ears of the Game"

Shows Time In and Out, Time Remaining of Play— Even to the Second!



This complete scoreboard at the Little Rock High School (Ark.). For example, a green and a red neon circular tube on the face of the clock show time in and out--the long hand marks off time in seconds, the short one shows minutes yet to play in that quarter.--At end of quarter a horn comes over the PA system, and clock stops automatically--the board is operated from the 50 yard line via an underground cable--the figures on the board are neonized and light upon action from the control panel. . . . Now is the time to plan for next Fall. Have your local sign company build your board, and use National control equipment.

●

The National scoreboard timer movement that drives the large hands with precision accuracy behind a 10 foot dial.

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For the Library

TILTED TAB GUIDES...

For Easy Reading

Catalog cards will not cling to these guides under the tabs, even when the cards are slanted forward. Celluloid tabs, tilted to insure easy reading, are attached by a special process, so that no metal eyelets mar or scratch the cards.

The guides are made of heavy, durable Pressboard. Tabs are half cut, left and right position. Size of guides is exact for use with standard size catalog cards, 12.5 x 7.5 centimeters, with round hole for guide rod.

Heavy paper strips, perforated for making labels for insertion in tabs, are included at no charge.

25 Guides $1.50 500 Guides $5.20 per 100
100 Guides $5.50 1,000 Guides $5.00 per 100

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TEXTBOOKS... Deserve the Best in Bindings

if they are to stand the strain of year in and year out service in the schools of the country.

Every textbook you purchase should be bound in Binders Board because this strong, sturdy board will protect your books from the wear that comes with constant handling.

To be sure of obtaining Binders Board in your textbook bindings, specify in all your orders:

"Books to be bound in Binders Board made according to U. S. Commercial Standard, CS50-34."

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BOOKS BOUND IN BINDERS BOARD ARE BOUND TO LAST

SANITARY SUPPLIES FOR SCHOOLS

(Concluded from page 48)

pyrophyllite, and is effective against bedbugs, fleas, brown dog ticks, and cockroaches. A good 5 per cent oil spray can be made by mixing 7 ounces of commercial DDT powder with one gallon of kerosene. This is effective against flies, mosquitos, sand flies, bedbugs, moths, fleas, ants, and cockroaches. If the vehicle in the oil spray is objectionable a 5 per cent water spray suspension can be made by mixing 13 ounces of the 50 per cent strength water-dispensable DDT with one gallon of water. These should be applied to surfaces rather than sprayed into the air.

As mentioned in the introduction the whole field of sanitary supplies is too vast to treat in one short article. However, the purpose of this article has been to get acquainted with some of the basic facts in connection with a select list of supplies. Every school should have the Federal Standard Stock Catalog, Section 4, Federal Specifications, Part 1, Index, which can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C.

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School Administration News

► Supt. John W. McDevitt in a report to the Waltham, Mass., school committee recently reported excessive stocks of supplies, instructional materials, and physical education materials in the Waltham elementary schools. The situation has grown out of failure in properly inventorying stocks on hand and in requisitioning additional items. Some of the paper stock found is so old that it is no longer usable. One school had 235 gross of chalk on hand, a 15 years' supply. Upon recommendation of the superintendent a methodical inventory will be taken yearly, and requisitions will be limited to evident needs.

► Supt. Wm. R. Bruce has been directed by the Sparta, Wis., school board to conduct an occupational survey of the Sparta trading area as a step to the establishment of vocational work in the local schools. The survey will include studies of the population, the manufacturing and retail business establishments, farms, and agricultural and salesmanship courses are to be planned on the adolescent and adult levels.

► Paul Norris, director of transportation for the Iowa State department of public instruction recently declared that a survey shows 150 Iowa school districts need 230 of the 19-passenger type school buses.

Most school buses are of 36- to 19-passenger capacity, too large for some of the smaller school districts and for some rural areas where road conditions are poor and runs are short, according to Mr. Norris.

"The survey covered 985 schools, of which 150 said they needed smaller buses. Need for the equipment arises because the present buses are wearing out and because of plans for extended routes under the new two million dollar state school bus transportation aid act."

It is believed that it will be impossible to obtain all the buses needed.

► Evening classes in the fundamentals of the real estate business are conducted in the Soldan High School, St. Louis, Mo., as a part of the distributive education program. Special emphasis is based on the law of property, contracts, etc.

► Veterans, residents of Grosse Pointe, Mich., have been offered a complete tutorial service on the high school level with credit for admission to liberal arts colleges.

► Belleville, Ill. Janitors in elementary and junior high schools have been granted an increase of $14 monthly.

► The board of education at Rapid City, S. Dak., is engaged in a school building program to cost $250,000 and to include a Central Elementary School, a building in the west end of the city, an enlarged high school gymnasium, and the remodeling of an elementary school.

► The Shawnee, Okla., board of education has engaged two professors of the Oklahoma A. and M. College to make a survey of the local school building situation.

► Buena Vista County, Iowa, enjoys the services of consolidated schools in all towns except the county seat and has only two one-room rural schools in operation. Statistics show that 94 per cent of the farm children attend high school, according to County Superintendent A. E. Harrison of Storm Lake.

► The Kansas City, Mo., school board is cooperating with the municipal recreation commission to develop youth centers where young people may gather under wholesome surroundings for games, indoor sports, dancing, music, etc.

MESSAGES
TO AMERICAN
SCHOOL TEACHERS
No. 15

Commended for Classroom Use by Leading Educators from Coast to Coast

LONG EXPERIENCE and personal observation have led educators to the sources of knowledge which best inspire in today's youth a deep loyalty to the ideals of democracy. The following excerpts from recent signed statements testify to their appreciation of *The Reader's Digest* . . . as an effective classroom aid in perpetuating these ideals:

We must raise a generation committed to the improvement of our democracy and constitutional government. Accurate information on significant current developments is a necessary adjunct in this task. *The Reader's Digest* provides a concise, readable handbook of world events and trends.— **Alonzo G. Grace, State Commissioner of Education, Connecticut.**

The youth of our land should be given abundant opportunity to inform themselves on current social, economic and scientific matters, and I know of no better or more pleasant way of securing such information than through *The Reader's Digest*. — **Elizabeth Ireland, State Superintendent of Public Instruction, Montana.**

The Reader's Digest is a fortress of defense against ignorance of what is going on in our own and other lands. . . . I should like to see it in the hands of every high school student, and of many in the upper elementary grades. —**James Haskell Hope, State Superintendent of Education, South Carolina.**

For use in schools, a magazine such as *The Reader's Digest*, which offers accurate and interesting summaries of significant events and achievements in the social, scientific and economic fields, is of high value.—**Francis B. Haas, State Superintendent of Public Instruction, Pennsylvania.**

The Reader's Digest is a continuing and impartial "diary" of the American way of life and the actual workings of our democracy. At a time when world welfare is to be so influenced by our course here at home, its value as an aid to the teaching of good citizenship increases the need for its use in our schools. — **John Callahan, State Superintendent of Public Instruction, Wisconsin.**

As never before, pupils in our schools need to read widely if they are to think clearly on many and varied topics. Because *The Reader's Digest* presents up-to-the-month information on current events and personalities, this publication has come to be a valuable and widely used supplement to our reading in many high school and lower-grade classes.—**Esther L. Anderson, State Superintendent of Public Instruction, Wyoming.**

One of the first, and certainly one of the most important duties of every school teacher today is the planting of Lincoln's sort of Americanism in the hearts and minds of our youth. . . . I feel that the School Edition of *The Reader's Digest* should be classed among the valuable mediums for aiding this vital task. — **Vernon L. Nickell, State Superintendent of Public Instruction, Illinois.**

I would place *The Reader's Digest* at the head of the list of required reading for teachers and high school students. —**John A. Shaw, Superintendent of Schools, Spokane, Washington.**

The Reader's Digest is a fascinating record of events and trends, which broadens the outlook of students and gives them a more comprehensive grasp of the principles and meaning of good citizenship. — **Arthur E. Thompson, State Superintendent of Public Instruction, North Dakota.**

As an auxiliary aid to classroom instruction in the building of bedrock Americanism, the value of *The Reader's Digest* is very high. — **Burgin E. Dossett, State Commissioner of Education, Tennessee.**

The Reader's Digest is making a contribution to the maintenance of our form of government, especially by implanting in young minds the concepts of desirable human relationships.—**Rex Putnam, State Superintendent of Public Instruction, Oregon.**

The teacher who understands the scope of her assignment, and sees her objectives clearly, will value *The Reader's Digest*, which keeps its readers in touch with the forces which make TOMORROW. It offers information—common knowledge for common understanding for common citizenship in a common world: one world.—**John Fred Williams, State Superintendent of Public Instruction, Kentucky.**

The Reader's Digest is in an especially unique position, because of its wide use in the schools, to play an important part in strengthening the walls of democracy.—**Wayne O. Reed, State Superintendent of Public Instruction, Nebraska.**

Statements like these are more significant than anything we ourselves might say about the place which *The Reader's Digest* holds in the hearts and minds of teachers throughout the country who are molding a new generation of Americans.

The Reader's Digest

Why You will Want Mosinee Towels In Your School Washrooms

Good background and environment are necessary to the making of a good product. In this mill, for over 20 years, the people of Bay West have devoted all their time and skill to the manufacture of one product — towels, made from pure sulphate paper, for washroom use.

This specialization is important to you because it means that the combined efforts of every person at the mill, and their experience gained through the years, is directed toward one objective — the manufacture of the finest washroom towels obtainable — to be distributed through leading school supply merchants, at a fair price.

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EXPENDITURES FOR PUBLIC RELATIONS

(Concluded from page 22)

Since public relations is system wide in its nature, it belongs in the budget category of general control. This statement is supported by the recommendation in *Circular 204, Financial Accounting for Public Schools,* (U. S. Office of Education, 1941).

Of the few school systems which make any provision for public relations in their budgets, two are cited as examples. Rochester (N. Y.) appropriated $2,750 for "public information" in its 1945 budget. This was about three tenths of one per cent of the total current expense budget of $8,462,000. In the past few years the ratio has ranged from this figure to about one per cent. Los Angeles has allowed about one tenth of one per cent for its "School Information Section." Probably from one half to one per cent for public relations would not be excessive and yet fairly adequate in most school systems. The local need for interpretation and the size of the school system and its financial resources would influence this.

The case for planning and budgeting public relations has been discussed here with reference to public schools. It holds for educational undertakings of all kinds, however, and for many other types of public service agencies. The conclusion seems justified that it is impossible to carry on an intelligent program of interpretation in the absence of detailed planning, co-ordination, and adequate budgetary provision.

STUDY MISSISSIPPI'S WHITE GOLD

(Concluded from page 32)

The editor of *The Clarksdale Daily Press* — commented on the exhibit as follows:

If you have lived in the land of cotton all your life and do not know what it costs to produce a bale of cotton under average conditions, you could ask a cotton farmer and get the information. Perhaps you would like to know the cost of operating the mechanical cotton picker, the future of cotton in competition with foreign trade, what part cotton is playing in winning the war. If you want to know any of these things, you could write some letters to the Department of Agriculture, discuss various phases of the cotton industry with some of the South's experts, and get some information, but the chances are you could ask a Clarksdale High School student any of these questions and get an intelligent, comprehensive picture of the cotton industry of the Mississippi Delta.

It is probable that these students are better informed than the majority of dealers in cotton, who have studied it from only the angle in which they are particularly interested.

If you doubt the knowledge of these students, who have just completed a four-month intensive study of the South's major industry, you should have visited the exhibit at the Clarksdale High School last night and caught a bird's-eye view of what these students have learned about our major crop.

Miniature cotton fields were displayed with negroes gathering the fleecy staple in the old way, and in an adjoining field was the new mechanical picker at work. The students know what it costs to produce cotton by day labor, by tenants, and then have compared these costs with the new mechanical pickers.

They have studied the cotton industry from the time it was first planted in the Delta; they know its progress, they know what part cotton has played in the war, in the radio, and what part it will have in your dreamhouse of tomorrow.

They know about gathering the crop, the labor problems, competition with foreign markets, the grades of cotton, seed, ginning, and the by-products of cotton.

A comprehensive study has been devoted to gins, cottonseed dryers, and other mechanical devices that are used in producing cotton.

The students have not been given a smattering of the cotton industry, but a practical, sound study of the whole cotton picture.

CONVENTION CALENDAR

April 12. Kentucky State Industrial Arts Association at Louisville, Ky. Eivind O. Eiken, Du Pont Manual High School, Louisville, Ky., secretary. Headquarters, Kentucky Hotel.

April 23–26. American Association for Adult Education at Detroit, Mich. Mr. Morse A. Cartwright, 525 West 120th St., New York 27, N. Y., director.

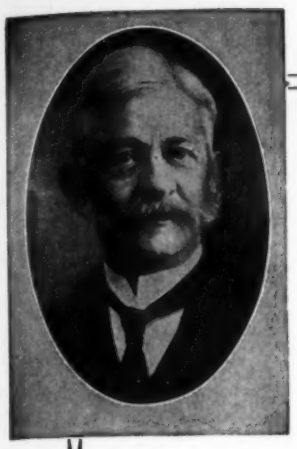
April 25–26. Wisconsin Association of School Boards, Hotel Pfister, Milwaukee. Mrs. Letha Bannerman, Wausau, secretary.

April 26–27. Wisconsin Association of School Administrators, Milwaukee, Wis.

June 16–23. American Library Association at Buffalo, N. Y. Carl H. Milam, 520 North Michigan Ave., Chicago 11, Ill., executive secretary. Headquarters, Memorial Auditorium. Exhibits.

June 26–28. Pennsylvania Vocational Association at Eagles Mere, Pa. Dr. Henry S. Brunner, Dept. of Agr. Education, Pennsylvania State College, State College, Pa., secretary. Headquarters, Forest Inn. Exhibits.

June 30–July 7. National Education Association, Representative Assembly, Buffalo, N. Y. Willard Givens, secretary, Washington 6, D. C.



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PUBLICATIONS — SCHOOL-BUSINESS EXECUTIVES

Operation and Care of School Buildings

By A. H. Milne. Paper, 71 pp. Montreal Protestant Central School Board, Montreal 2, Canada.

This manual outlines in detail the duties of school caretakers, particularly with respect to (1) general care, (2) heating equipment, (3) electrical equipment, (4) repairs, (5) general maintenance; and (6) painting and redecorating. Throughout the manual, the directions are clear cut, simple, and direct and set a high standard of cleanliness and of mechanical efficiency.

Comparative Tax Rates of American Cities — 1945

Prepared by the Volker Fellows. Paper, 18 pp., National Municipal Review, New York, N. Y.

This reprint of an annual compilation indicates that tax rates are still increasing.

How to Cut Food Costs

By E. H. Fleischman and Elsabelle Curtis. Paper, 72 pages. Published by New York State Restaurant Association, 369 Lexington Avenue, New York 17, N. Y.

This co-operatively published book outlines definite methods for purchasing food for restaurant purposes, judging the quality of foods, controlling and cutting food cost by proper handling, cooking, and use of left overs. The section outlining methods of fixing correct menu prices will be of a special help to school cafeteria managers.

Report on Animal Glues

Paper, 10 pages. National Association of Glue Manufacturers, New York 18, N. Y.

A basic presentation of the uses in industry and the crafts of animal glues.

School Costs in Ohio

Compiled by W. R. Flesher and T. C. Holy, published by the Bureau of Educational Research, College of Education, Ohio State University, Columbus 10, Ohio.

These three publications present the cost per pupil in average daily attendance in (1) Ohio city school districts, (2) Ohio exempted village school districts, (3) Ohio county school districts from July, 1944 to June, 1945. The figures indicate that there has been an increase in the cost of every element of conducting a school. The total percentage of increases in the cities has been 9.7, in the exempted villages 16.0, and in the counties 13.5.

Earnings of Municipal Employees

Bulletin 848, 32 pp. U. S. Department of Labor, Washington, D. C.

A statistical summary of the earnings and wage practices of employees in municipal governments of 15 cities, 1944. Included are descriptions of conditions of work, tenure, pensions, etc.

Paint Manual

By P. H. Walker and E. F. Hickson. Cloth, 165 pp., $1. Superintendent of Documents, Washington, D. C.

This manual has been prepared to help government agencies specify and supervise painting jobs particularly in buildings. In addition to complete specifications, directions for preparing surfaces, and applying coating materials, the manual lists bulking values of materials, a reference list, a glossary, and a list of federal specifications.

Manual of Fire Drill Procedure

By E. J. Wall, *et al.* Paper, 19 pp. Boston Public Schools, Document 9, 1945.

The Boston School Saftey Council made up of teachers, headed by Mr. Wall, supervisor of health and safety education, holds that a fire drill is a serious school exercise providing a valuable educational experience. The document just issued sets up the responsibility and the activity to be engaged in during fire drills by the (*a*) principal, (*b*) the teacher, (*c*) the pupil, (*d*) the custodian. The emphasis is quite as much on saftey from panic as saftey from fire. Best leadership of teachers and co-operation of pupils is to be based on understanding.

Composition of Trade-Name Solvents

By Allen D. Brant, *et al.* Public Health Reports, February 1, 1946, Washington, D. C.

This extensive list of solvents, cleaners, and degreasers has been compiled principally from the standpoint of their danger to life and health. It is noted that many involve fire and explosion hazards.

Installation of Pulverized Fuel Systems

Prepared by committee on Dust Explosion Hazards, NFPA. Paper, 24 pp. National Board of Fire Underwriters, New York, N. Y.

The standards of equipment and installation are approved by the American Standards Association in addition to the sponsoring organization.

NEW BOOKS

New Applied Mathematics

By S. J. Lasley and M. F. Mudd. Cloth, xii–431 pages. Prentice-Hall, Inc., New York, N. Y.

This third edition of a deservedly popular secondary school text has been revised to include numerous suggestions of users and to slant the skills of students to postwar industrial and social uses.

A History of the North Central Association

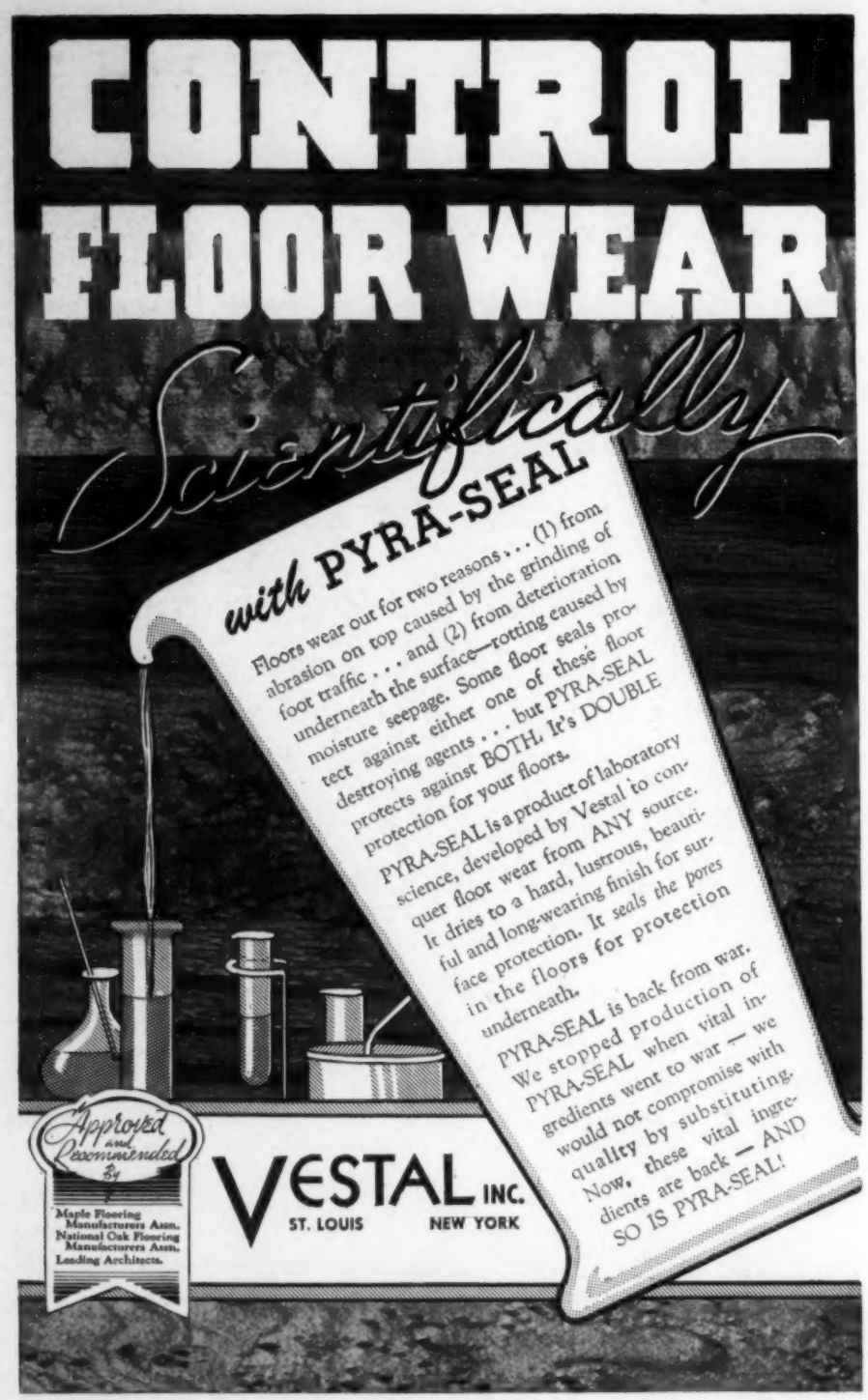
By Calvin O. Davis. Cloth, 286 pp., $2. The North Central Association of Colleges and Secondary Schools, University High School Building, Ann Arbor, Mich.

The North Central Association is fortunate in having so well and directly informed a man to write the history of its fifty years of service in bringing together and upgrading the colleges and high schools of the middle west. Unquestionably the Association has at times floundered; it has had no higher philosophy of education than that of its members and there has been and is, with the exception of a few easily accepted points, little agreement on fundamental problems of life and its ultimate purposes. But, as Dr. Gage remarks, the Association is a remarkable example of democracy at work. Its varied and successful work represents an endless amount of unpaid labor on the part of its officers, its committees, and its writers and editors. Its accrediting policies have been most effective where most needed and if it has not always been able to raise the totality of the member schools and colleges in the teaching efficiency and scholarship desired, the poorest members have been brought up to the average and the latter has been slowly but surely raised in the quality of teacher preparation, quantity and quality of curriculum, equipment and financial support.

Basic Mechanical Drawing

By Glenn N. Schaeffer. Paper, 89 pp., 60 cents. The Bruce Publishing Co., Milwaukee, Wis.

This book is both a text and a problem book for beginners in mechanical drawing, and is addressed particularly to junior high school classes where exploratory and guidance purposes are combined with teaching of the simplest principles of orthographic projection. The course takes into account the social purposes of teaching mechanical drawing and fully recognizes the fact that nine out of ten boys will use their knowledge of the subject as consumers only.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INDIANA SCHOOLMEN STUDY POSTWAR SCHOOL BUILDING

(Concluded from page 44)

frequently require adaptation in existing building or a new concept in planning for new buildings. Industrial changes are much more rapid than are educational changes; therefore, one proceeds with the construction of a school building with less fear of obsolescence but with a full realization that the design must be such as to afford reasonable flexibility."

In discussing technical considerations in relation to housing the audio-visual program of schools, Karl R. Schwarz, South Bend (Ind.) architect, said that the whole structure should be designed in the same manner as most industrial and office structures — a beam and column system with relatively few structural or bearing partitions. "In like manner," Mr. Schwarz said, "exterior surfacing and windows are designed so as to be in a regular or modular progression and if the mechanical lines be run on a modular basis, the whole space could be subdivided into the various sized and shaped rooms the teaching requirements demand at any time during the life of the structure."

One of the features of the meeting was a panel discussion on current problems in construction in which seven schoolmen and architects participated. Wilbur B. Shook, Indianapolis architect, pointed out that a tremendous school housing need exists due, primarily, to building inactivity during the past five years and a potential increase in school population. "Building costs are higher — approximately 60 per cent above 1939 level, and will undoubtedly go higher before a decline," Mr. Shook said.

According to Clarence T. Myers, secretary-treasurer of the policy committee of the Indiana Construction Industry, practically all of the problems at the moment are due to shortages of almost any material we care to mention. "This is slowly correcting itself as we all know and most of the materials required in school construction will be available during the summer and autumn, we hope, in reasonable quantities."

"To build or not to build" is the question facing all superintendents, Luther Lockwood, superintendent of Columbus (Ind.) schools, told those attending the conference. "There is perhaps nothing that will jeopardize the educational leadership of the superintendent in the community as his failure to correctly grasp school building needs," he said. "A most perplexing problem arises when consideration is given to the availability of building materials and equipment and the inflated costs of construction. Would it be better to postpone building until costs have come down, if and when — or is the need so urgent that nothing must stand in the way of the program. Doubtless every community will take sides on this issue."

RULES TO BE OBSERVED BY THE PUPILS OF THE PUBLIC SCHOOLS OF MILWAUKEE

The Milwaukee Centennial has caused the Milwaukee Board of School Directors to unearth the following rules for pupils:

1. The pupils must appear at the appointed hours, with their hands and faces clean and hair combed, free from lice, itch, scald head, and other contagious diseases; and with their clothes clean and mended.
2. They must be careful of their schoolbooks; which are not to be soiled, torn, or scribbled in.
3. They must be regular in their attendance; and never loiter to or from school.
4. They must obey their instructors; and strictly observe the rules adopted for their government.
5. They must attend diligently to their studies.
6. They must not study aloud, or make improper gestures or unnecessary noise.
7. They must neither write, talk nor whisper to each other during school hours.
8. They must not leave their seats without permission; nor remain at play longer than the time prescribed for them.
9. They must in all cases speak the truth.
10. They must not quarrel with, or abuse each other, on any occasion.
11. They must not, either in speaking, or writing, use profane, indecent, or offensive language.
12. They should be polite and respectful in their behavior; and, neither do, nor say, anything to injure the person, feelings, or property of their neighbors, or associates.
13. No scholar shall be admitted into the schoolroom, who does not appear within 15 minutes of the appointed hour.
14. None but the children of actual residents, shall be admitted into the public schools; and no pupil shall be received, in any quarters, after the end of the first month unless the parents have recently moved into the district, or the pupil has been detained from school by sickness, or other sufficient cause.

By order of the Board of School Commissioners.

Rufus King, *president*
H. G. Abbey, *secretary*
Milwaukee, December, 1846

A NEVER ENDING JOB

The continued education of teachers means much more than making up defects in preparation. It means continuous growth in the capacity to teach. It means broadened understanding of human development and human living. And now more than at any previous period in school history it means growth in one's capacity to work with others, with classroom teachers and principals in a variety of activities, with the administration, with parents and community leaders, and with children of different age groups. —*Charles E. Prall* and *C. Leslie Cushman* in *Teacher Education in Service.*

THE SCHOOL TRUSTEE'S PLEDGE

To the end that he may fulfill his legal obligations and may contribute to the school's success in meeting the challenging demands of the time, both in the community and in the nation, the trustee affirms his intention of bringing to his job all the intelligence, energy, and enthusiasm that he can command.